THE ART OF LOGIKE.

Plainely taught in the Engliſh tongue,
by M. *Blundeuile* of Newton Flotman in Norfolke,
aſwell according to the doctrine of Ariſtotle,
as of all other moderne and beſt accounted Authors thereof.

A very neceſſarie Booke for all young ſtudents in any profeſſion to find out thereby the truth in any doubtfull ſpeech, but ſpecially for ſuch zealous Miniſters as haue not beene brought vp in any Vniuerſity, and yet are deſirous to know how to defend by ſound argumentes the true Chriſtian doctrine, againſt all ſubtill Sophiſters, and cauelling Schiſmatikes, & how to confute their falſe Sillogiſmes, & captious arguments.

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BRITISH MUSEUM

The Contents of the Chapters contained in euery one of the sixe Bookes or partes of this Treatise.

The contentes of the first booke, which treating of a question, and of wordes both singular and vniuersall, contayneth 23. Chapters.

N the first Chapter is defined what Logike is, of what partes it consisteth, and whereto such partes do serue.

Item, which be the two chiefe offices of Logike, and wherein Logike is chiefly occupied, that is, in discussing of questions, which is done by Definition, Diuision, & Argumentation.

The second Chapter sheweth what a question is, and that euery question is eyther simple or compounde, also of what partes a compounde question consisteth (that is to say) of two partes, called the subiect and the Predicate, and what those tearmes do signifie. Item because all questions doe consist of wordes eyther simple or compound, in this chapter are set downe three principall diuisions of wordes. First which be simple, and which be compound. Secondly which be of the first intention, and which be of the second intention. and thirdly which bee singular, called in Latine Indiuidúa, and which be vniuersall.

The third Chapter sheweth what Indiuiduum is, and all the foure kindes thereof, (that is) Indiuiduum determinatum, Indiuiduum demonstratiuum, Indiuiduum vagũ, and Indiuiduum ex hipothesi, (that is to say) by supposition.

The fourth chapter treateth of vniuersall wordes, whereof some are called Predicables, and some Predicaments, and first of the fiue predicables, (that is) Genus, Species, Differentia, Proprium, and Accidens, & how euery one is diuided, and to what vses they serue, but first of Species, and then of the rest.

The fift Chapter treateth of Predication, and of the diuers kindes thereof.

The sixt Chapter treateth of the ten Predicaments in generall, which be these, Substantia, Quantitas, Qualitas, Relatio, Actio, Passio, Vbi, Quando, Situm est, & Habere.

The seuenth Chapter treateth of the forepredicaments, and sheweth which they be, and to what end they serue.

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8 The eight Chapter treateth of the ten Predicamentes in ſpeciall, ſhewing what Subſtance is, and how many kindes there bee, and what propertyes it hath, whereto is added the Table of Subſtance.

9 The ninth Chapter treateth of quantity, both Whole and broken, called in latine quantitas continua, & diſcreta, and of the diuerſe kindes of both quantities, and what properties quantitie hath, whereto is added a Table of quantitie.

10 The tenth Chapter treateth of quality, and of the fower kindes thereof & in this Chapter are defined the 5. intellectual habites, that is, Intelligence, Science, Prudence, Art, and Sapience: it ſheweth alſo what properties qualitie hath, and to euery of the fower kindes of quality is added his proper Table.

11 The eleuenth Chapter treateth of Relation and of the kindes thereof, together with a Table ſhewing euery kinde, and finally what properties Relation hath.

12 The twelfth Chapter ſheweth what action is, and how it is deuided, & what properties doe belong thereunto.

13 The thirteenth Chapter ſheweth what paſſion is, and What properties doe belong thereunto.

14 The 14. Chapter ſheweth what the Predicament Vbi is, and how it is deuided, and what properties do belong to that Predicament.

15 The 15. Chapter ſheweth what the Predicament Quando is, how it is deuided, and what properties belong thereunto.

16 The ſixteenth Chapter ſheweth what the predicament Situm eſſe is, what it comprehendeth, alſo what deſcriptions are to be fetched from this predicament, and what thinges are ſaid to alter their ſituation, and finally what propertie it hath, to which predicament is added a briefe Table.

17 The ſeuenteenth Chapter ſheweth the diuers ſignifications of the predicament Habere, alſo what wordes it comprehendeth, with a Table ſhewing the ſame, and finally what properties it hath.

18 The eighteenth Chapter briefly ſheweth the manifolde vſes of the aforeſaid ten predicamentes.

19 The nineteenth Chapter treateth of the Poſtpredicaments, which are in number fiue, that is, Oppoſitio, ante & poſt, ſimul, motus, & habere, and firſt of Oppoſition, and how many thinges are ſaide to agree together, to bee diuers, or to bee contrarie one to another.

20 The twentieth Chapter ſheweth how many wayes thinges are ſaide to bee one before or after another, and to what ende that poſtpredicament ſerueth.

21 The 21. Chapter treateth of the poſtpredicamente Simul, ſhewing how many wayes thinges are ſaid to be together.

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The 22. Chapter treateth of the Postpredicament Motus shewing how many kindes of mouinges there be.

The 23. Chapter sheweth how many waies the worde Habere is to be vnderstood.

The Contents of the second booke, which treating of Definition, and of Diuision, and of Methode, containeth fiue Chapters.

THe first Chapter treateth of Definition, and sheweth how many kindes of definitions there be.

The second Chapter sheweth how many precepts are to be obserued to make a true definition.

The thirde Chapter treateth of diuision, and of the diuers kindes thereof.

The fourth Chapter sheweth how many preceptes are to be obserued to make a true Diuision.

The fift Chapter treateth of Methode, and of the three kindes thereof, that is, Compositiue, resolutiue, and diuisiue, and what Methode is to bee obserued in handling eyther of a simple, or of a Compounde question.

The Contents of the third Booke, which treating of a Proposition containeth 11. *Chapters.*

THe first Chapter treateth of a Proposition, shewing of what parts it consisteth, and how many wayes it is diuided, and what questions are to be asked of a Categoricall or simple proposition, being deuided according to substance, qualitie, and quantitie.

The second Chapter treateth in general of the three properties belonging to a simple Proposition, that is, Opposition, Equiualencie, & conuersion.

The thirde Chapter treateth of the lawes and conditions belonging to the foure Opposites, and also of the threefold matter of a proposition, that is, naturall, casuall and remote, and then of Opposition, shewing how many wayes simple propositions are said to bee opposite one to another.

The fourth Chapter treateth of the Equiualencie of simple propositions.

The fift Chapter treateth of the conuersion of simple propositions, shewing how manifold it is.

The sixt Chapter treateth of a modall proposition, and of the two kindes thereof, that is to say, Coniunct and Disiunct.

The seuenth Chapter briefly treateth of the Opposition, Equiualency, and conuersion belonging to Modall propositions.

The eight Chapter treateth of Opposition belonging to Modall Propositions.

The ninth Chapter treateth of Equiualency and Conuersion of Modall propositions.

The 10. Chapter treateth of an Hipotheticall or compound Proposition, shewing how it is deuided, that is, into a conditionall, copulatiue, and disiunctiue, and of what partes it consisteth, and also what thinges are to be considered in a compound proposition.

The 11. Chapter treateth of the truth and falshood of all the 3. kindes of compound propositions, first of the conditionall, secondly of Copulatiue, and thirdly of the Disiunctiue.

The contents of the fourth booke, which treating of logicall places contayneth 6. Chapters.

THe first Chapter sheweth what a place is, and that it is twofold, that is, eyther of persons or of things. Againe the places of things be eyther artificiall or inartificiall, and the artificiall places of thinges are eyther inward, outward or meane: and the inartificiall places of thinges are 6. in number, comprehended vnder the place of authoritie, as the Table of places set downe in the beginning of this Chapter doth plainely shew. Also this Chapter sheweth to what end such manifold diuisions of the places serueth, & how places are diuided according to the schoolmen, that is, into Maxims, and difference of Maxims.

The second Chapter setteth downe examples of all the places belonging to persons.

The third Chapter treateth of the places of things, and first of artificiall places, whereof some be inward, some outwarde, and some meane: and first of inwarde places, whereof some belong to the substance of things, and some doe accompany the substance, giuing examples of euery place, together with their proper Maxims or generall rules belonging to the same and how arguments are to bee fetched from euery such place eyther affirmatiuely or negatiuely, or both wayes.

The fourth Chapter treateth of outwarde places, shewing how arguments are to be fetcht from euery such place, together with the generall rules or Maxims belonging to the same.

The fift treateth of meane places, giuing examples, and shewing how argumentes are to be fetcht from such places, together with the rules belonging thereunto.

The 6. Chapter treateth of the ſixe inartificiall places comprehended vnder the place of authority, whereunto is added a table of authoritie. And in this Chapter is not onely declared to what end the knowledge of all the foreſaid places do ſerue, but alſo it ſheweth by one example how to vſe them when neede is, eyther to proue or to dilate any theame, which example is taken out of Hunneus. The theame whereof is thus: Man ought to embrace vertue.

The Contentes of the fift booke, which treating of argumentatitation, and of demonſtration, containeth 32. Chapters.

THe firſt Chapter treateth of Argumentation, and of the foure kinds, thereof in generall, and alſo of the firſt principles of a Sillogiſme, aſwell materiall as regular.

The ſecond Chapter ſheweth what a Sillogiſme is, how it is diuided, and of what parts it conſiſteth (that is) of matter and forme.

The third Chapter ſheweth what that matter and forme is, and that the matter conſiſteth of three tearmes and three propoſitions, and the forme to conſiſt of figure and Moode. Alſo by what meanes the meane tearme or poofe is to be found out. And finally it defineth the three propoſitions, whereof a ſimple Sillogiſme conſiſteth, ſhewing how they are named, and how to frame the ſame to make a true Sillogiſme.

The fourth Chapter ſheweth what Figure or Moode is, whereof the forme of a Sillogiſme conſiſteth, and how many ſuch figures there bee, and when a Sillogiſme is ſaid to conclude directly or indirectly: it ſheweth alſo how many moodes doe belong to euery figure, and how they are named. And finally what the foure vowels A. e. i. o. do ſignifie in any ſuch moode or vocable of art.

The fift Chapter ſetteth downe certaine rules aſwell general as ſpeciall belonging to the three figures.

The ſixt Chapter giueth examples of the foure perfect moodes belonging to the firſt Figure.

The ſeuenth Chapter giueth examples of the fiue vnperfect Moodes, belonging to the firſt Figure.

The eyght Chapter giueth examples of foure Moodes belonging to the ſecond Figure.

The 9 Chapter giueth examples of the ſixe Moodes belonging to the third Figure.

The 10. Chapter treateth of a Sillogiſme expoſitory, ſhewing why it is ſo called.

The 11. Chapter answereth to an obiection concerning the three figures and Moodes belonging to the same.

The 12. Chapter treateth of Reduction, and of the kindes thereof, & also of the signification of certaine Consonants in the wordes of art seruing to Reduction.

The 13. Chapter treateth of Reduction by impossibilitie, shewing vnto which of the perfect Moodes euery vnperfect Moode is to bee reduced by impossibility.

The 14. Chapter treateth of a Sillogisme made in oblique cases, and of the 6. habilities, and three defects of a Sillogisme.

The 15. Chapter treateth of a compound Sillogisme, shewing that it is threefold, that is, Conditionall, Copulatiue, and Disiunctiue, and that the truth of a compound Sillogisme is to bee found out by reducing the same into a simple Sillogisme.

The 16. Chapter treateth of a Consequent, shewing what it is, and of how many parts it consisteth, and how it is diuided, also by what meanes, and by what rules the goodnesse of a Consequent is to bee knowne.

The 17. Chapter treateth of a Sillogisme demonstratiue, shewing what it is, and of what manner of propositions it consisteth, which propositions are here defined, it sheweth also the three properties belonging to the predicate and subiect of a demonstratiue proposition, and also sheweth what definitions Aristotle maketh of demonstration, and it defineth what science is, and thereby giueth example of a Sillogisme demonstratiue.

The 18. Chapter treateth of the three things, whereon dependeth the certainty of mans knowledge, that is, vniuersall experience, principles, and mans naturall knowledge in iudging of Consequents, shewing how principles are defined by Aristotle, and how they are deuided by the Schoolemen.

The 19. Chapter sheweth that the schoolemen do deuide Demonstration into two kindes, that is, eyther perfect or vnperfect, wherein is declared what is to be obserued in eyther kind of demonstration.

The 20 Chapter treateth of science, opinion, ignorance, wit, and the foure scientiall questions.

The 21. Chapter treateth of a Sillogisme dialecticall, shewing what it is, and of what kindes of propositions it is made, and what things are said to be probable: Againe it sheweth how the Schoolemen doe make the matter, whereof a Sillogisme consisteth to be twofold, that is, Materia remota, and materia propinqua, and what each matter containeth. And finally, it sheweth the difference betwixt a dialecticall proposition, a probleme, and a position.

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The 22. Chapter treateth of a ſophiſticall Sillogiſme, ſhewing what it is, and that it may be falſe three manner of wayes. Alſo in this Chapter is declared another kind of falſe Sillogiſme, called Sillogiſmus falſigraphus.

The 23. Chapter treateth of Induction, ſhewing what it is, and what is to be obſerued therein, and that it is twofold, that is, perfect and vnperfect.

The 24. Chapter treateth of an Enthimeme, ſhewing what it is, of what partes it conſiſteth, and from whence that kinde of argument is to be fetched.

The 25. Chapter treateth of an example, ſhewing what it is, & wherein it differeth from all the other formes of arguments, and to what ende it ſerueth, and what is to be obſerued in reaſoning thereby. And finally from what places ſuch argument is to be fetched.

The 26. Chapter treateth of an argument called Sorites, ſhewing how it proceedeth, and wherein it differeth from the argument of the Rhetoricians called Gradatio.

The 27. Chapter treateth of diuers other kinds of captious arguments, and firſt of Dilemma, ſhewing of what parts it conſiſteth, and how many kinds of captious arguments it comprehendeth, which are theſe foure, that is, Ceratins or horned arguments, Crocodelites, Aſſiſtatons, and Pſeudomenons, euery one of which is here defined, and example giuen thereof.

The 28. Chapter treateth of an argument called Enumeratio, ſhewing what it is, and how it is to be confuted.

The 29. Chapter treateth of an argument called Simplex concluſio, ſhewing what it is.

The 30. Chapter treateth of an argument called Subiectio, ſhewing what it is, and that it differeth not much from Enumeratio before deſcribed.

The 31. Chapter treateth of an argument called Oppoſitio, made of parts repugnant.

The 32. Chapter treateth of an argument called Violatio, which is more meete to confute then to proue.

The Contents of the 6. Booke, which treating of Confutation contayneth ſixe Chapters.

THe firſt Chapter ſheweth that Confutation is twofolde, whereof the one belongeth to the perſon, the other to the matter: and that of matter is deuided into two kindes, that is, generall and ſpeciall,

and

and the generall confutation is done three manner of wayes, that is, eyther by denying the Conſequent, by making diſtinction, or els by inſtance, any of which three wayes, when it is to be vſed, is here ſet downe.

The ſecond Chapter treateth of ſpeciall confutation, ſhewing how it is done, and what order Ariſtotle obſerueth in treating of ſpecial confutation, whoſe order is briefly here ſet downe, and firſt of an Elench.

The third Chapter treateth of diſputation, and ſheweth how manifold it is.

The fourth Chapter ſheweth the 5. markes of ſophiſtrie, that is, Reprehenſio, Abſurdum, Paradoxis, Soleciſmus, and Nugatio, with their examples.

The fift Chapter ſheweth that there be 13. fallaxes, whereof 6. do conſiſt in wordes, and 7. in things, and firſt it treateth of the 6. fallaxes conſiſting in words, and ſheweth how to confute the ſame.

The ſixt Chapter treateth of the 7. fallaxes conſiſting in things, and ſheweth by examples how to confute the ſame.

The

THE FIRST BOOKE OF *LOGIKE.*

¶ Of the Art of Logike, and of the parts and offices thereof. CHAP. I.

WHat is Logike?

Logike is an Art which teacheth vs to dispute probably on both sides of any matter that is propounded.

Of what & how many parts doth it consist?

Of two: that is, Inuention & Iudgement.

Whereto serue these parts?

Inuention findeth out meete matter to proue the thing that yee intend, and Iudgement examineth the matter, whether it be good or not: and then frameth, disposeth, and reduceth the same into due forme of argument.

What is the chiefe end or office of Logike?

The chiefe end or office of Logike is twofold: the one to discusse truth from falshood in any manner of speech: the other is to teach a compendious way to attayne to any Art or Science: and therefore it is deemed of some, to be the Art of arts, and Science of sciences: not for that it teacheth the principles of euery arte or science (for those are to be learned of the Professors of such artes or sciences) but because it sheweth the methode, that is to say, the true order and right way that is to be obserued in seeking to come to the perfect knowledge of any arte or science: of which methodi-

call part mine old friend M. Iacomo Acontio Tridentino hath writ-
ten in the Latine tongue a verie proper and profitable treatise:
and therefore I minde heere to deale onely with the first office,
which is to discusse and to discerne trueth from falshode in anie
speech or question that is propounded.

How is that to be done?

By three speciall instruments, that is, by Definition, Division
and Argumentation: whereof wee shall speake hereafter in their
proper places: in the meane time, because questions are ẏ matter
wherin Logike is chiefly occupied, we wil speak first of a questiõ.

Of a question, and of certain diuisions of words. Chap. 2.

WHat is a Question?

A Question is a speech whereof some doubt is made
and uttered wᵗ some interrogatorie, as How, what, or
whether: and such question is either simple or cõpound.

Which call you Simple, and which Compound?

It is called simple, when the Question consisteth onelie of one
word, as when I aske what Iustice is, or what Fortitude is, and
such like: and is to be discussed by defining and dividing the
same. It is called compounde, when it consisteth of manie words
ioyned together by rules of Grammer, to make some perfect sen-
tẽce: as when I aske whether it be lawful for ẏ christians to make
warre upon the Turkes or not: and such like question, which is to
be discussed by arguing and reasoning on both sides: for Defini-
tion, Division & Argumentation, as I said before, are the 3. espe-
ciall instruments whereby Logike findeth out the truth in any
doubtfull matter.

Of what parts doth a compound question consist?

Of two, that is, the subiect and the predicate.

What meane you by these words subiect and predicate?

The subiect is the word or sentence, whereof another word or
sentence called the predicate is spoken: as when I say, Man is a
sensible body: here this word man is ẏ subiect, & sensible body is
the predicate: or each of them may containe manie words, as this,
To be learned in the law requireth a long studie, here to be lear-
ned in the law, is the subiect, and all the rest is the predicate.

How shall I know in long speeches, and specially being preposte-
rouslie set, which is the Subiect, and which is the Predicate?

By asking this question who, or what: for that which answe-
reth to this question is alwayes the Subiect: as in this example,
It were meete to learne my Grammer perfectlie before I entred
into my Logicke: heere if you aske what is meete, you shall finde
that to learne my Grammer perfectlie, is the Subiect, and all the

rest

reſt to be ỹ predicate. And note that theſe two words, ſubiect and predicate, are ſaid to be ỹ termes, limits, or extreame bounds of a Propoſition, whereof we ſhall ſpeake hereafter.

Sith euerie queſtion doth conſiſt of words, me thinks it were neceſſary to ſhew how words are diuided.

Of words the Schoolemen make diuers and manifold diuiſions, of which I minde heere to recyte but three only, whereof the firſt is this: Of words ſome be ſimple, wich they call incomplexa, and ſome be compounde, which they call complexa. Simple or ſingle words are ſuch as are ſole or ſeuered one from another, not making any ſentence, as man, horſe, wolfe. The compounde are words ioyned orderlie together by rules of Grammer, to make ſome perfect ſentence, as, Man is a ſenſible bodie. And hereof the queſtions are ſaid to be eyther ſimple or compounde, as hath bene ſaid before.

What is the ſecond diuiſion of words.

Of words ſome be of the firſt Intention, & ſome of the ſecond.

Which are they?

Words of the firſt Intention are thoſe, whereby any thing is ſignified or named by the purpoſe and meaning of the firſt author or inuẽtor therof, in any ſpeech or language whatſoeuer it be, as ỹ beaſt wheron we commõlie ryde is called in engliſh a horſe, in latine, Equus, in Italian Cauallo, in Frenche Cheual. Words of the ſecond Intention are termes of Arte, as a Nowne, Pronowne, Verbe, or Participle are termes of Grammer: likewiſe Genus, Species, Proprium, and ſuch like are termes of Logike.

What is the third diuiſion of words?

Of wordes ſome be called indiuidua, that is to ſay, particular or rather ſingular, and ſome be called vniuerſalia, that is to ſay, vniuerſall, common or generall.

Of ſingular & moſt particular words called Indiuidua. Cap. 3.

WHat is Indiuiduum?

Indiuiduum is that which ſignifyeth but one thing only, and can be applied but to one thing only, as this name John, or Robert ſignifieth but one certain man and not manie.

How manie kinde of indiuiduums be there?

Fowre, that is, indiuiduum determinatum, indiuiduum demonſtratiuum, indiuiduum vagum, and indiuiduum ex hypotheſi.

What is indiuiduum determinatum?

Indiuiduum determinatum, that is to ſay, certain or determined, is the proper name of ſome one certain thing, whatſoeuer it be, as John or Thomas is the proper name of ſome or one man: again

Bucephalus is the proper name of great Alexander his horse: and London is the proper name of the chiefest cittie in England.

What is indiuiduum demonstratiuum?

Indiuduum demonstratiuum, which is as much to say, as shewing or poynting, is a common word or name ioyned with a Pronowne demonstratiue, to signifie some one certaine thing onely, as whē we say this man, or that horse: and indiuduums demonstratiue be more readie to signifie particular things, aswell in accidents as in substances, then are Indiuidua determinata: for This or That, and such like pronownes, doe poynt out a thing, as it were with the finger, when proper names often times do fayle, yea the Pronowne demonstratiue is of such force, as being ioyned to the most generall word that is, maketh it Indiuduum, aswell as when it is ioyned to the most especiall, for this substance or this bodie is Indiuiduum, aswell as this man or that horse.

What is Indiuiduum vagum?

Indiuiduum vagum, that is to say, wandering or vncertaine, is a word betokening some one certaine thing, but not certainly, as when I say, there was a certaine man heere to seeke you: by this speeche is meant but one man, & yet vncertaine who it was: and therefore to make the thing more certain, we vse to adde some token or mark, as we reade in the Acts of the Apostles, There was a certain man which was halt & lame from his mothers wombe, whome they laide daylie before the gate of the Temple &c. And note that like as we do vse indiuidua, demōstratiua, & determinata, in declaring things either present, or certainly knowne: so in speaking of thinges absent or vncertainely knowne, wee expresse our myndes oftentimes by indiuidua vaga.

What is indiuiduum ex hipothesi?

Indiuiduum ex hypothesi, that is to say, by supposition is a word which of his owne natural signification being common and vniuersal, is made notwithstanding by supposition a singular word and to signifie but one thing onely: as for example, this word, the Sonne of Marie is a common terme, and yet by supposition is made to signifie none but Christ onlie: likewise when we say the Greeke Poete, we meane none but Homere.

Of words vniuersall or generall. Chap. 4.

What words are said to be vniuersall or generall?

Those words are said to be vniuersall which are spoken of many things, ỹ is to say, which may be applyed

plyed to many things, or comprehend many things, as this word animal (which is as much to say as a sensible body) comprehendeth both man, brute beast, fish, fowle, birde, and euerie thing els that hath feeling and mouing.

How are such words diuided?

Into Predicables and Predicaments.

Of the fyue Predicables.

WHat call you Predicables?

Predicables are certain degrees, or rather petigrees of words that be of one affinitie, shewing which comprehend more, and which comprehend lesse.

How manie such be there?

There be fyue, that is to say, Genus, Species, differentia, Proprium & Accidens: which may be englished thus, generall kinde, speciall kinde, difference, propertie and accident. But we thinke it best to begin first with species, because it is next to Indiuiduum.

Of the speciall kynde called in Latine, *Species*.

WHat is Species?

Species is a speciall kinde, which is spoken of many things, that is to say, it comprehendeth manie thinges differing onlie in number in asking the question, what the thing is: as when I aske, what is John: it is rightly answered to say, a man: for this word (man) is an vniuersall word comprehending both John, Thomas, Robert, and all other singuler men.

How manifold is species?

Twofold: that is, infima & subalterna: infima, that is to say, the lowest or most especiall kynde is that, which comprehendeth many thinges differing onely in number, and therefore can not be a generall kinde, as man, horse, and such like speciall kindes: species subalterna is that which comprehendeth manie thinges differing in kinde, and in diuers respects may be both genus and species, as these words, animal or sensible body, bird, fish: for this word bird, in that it comprehendeth diuers kinds of birdes, as a blacke bird, a Mauys, a Goldfynche, and many other kindes of birds, it is a generall kinde: but in respect of these wordes, substance, bodie, or animal, it is but species.

How is species called of the Greekes?

It is called Idea, which is asmuch to say, as a common shape conceyued in the mynde, through some knowledge had before of

one or two individuums having that shape: so as after we have seene one wolfe or two, we beare the shape thereof continually in our myndes, and thereby are able to know a wolfe whensoever we finde him, or if neede be to paint him. But genus extendeth too far, & comprehendeth too many speciall kinds to be so easily painted: and note that such shapes or idex, are said also to be perpetual.

Why are they said to be perpetuall?

Because they continue in the minde, though the things themselues cease to haue any being: as the shape of a Rose continueth in our mindes in the cold hart of winter, when there is no Rose in deede. And this is the true meaning of Plato touching Idex, that is, to be perpetuall in the minde, not separate from mans intelligence, as some men fayne: for vniuersalities are alwaies to be comprehended in mans minde, but not individua: which, because they are infinite, there can not be had of them no certaine science or knowledge.

Of the generall kinde called Genus.

WHat is Genus?

Genus is a generall kind which may be spoken of manie things differing in speciall kinde, in asking the question, what the thing is, as if I aske, what is man or horse? It is rightly answered to say, animal: for this word animal comprehendeth both man, horse, lion, & many other speciall kindes of beasts.

How is it diuided?

Into two, that is, Genus most generall, and genus subalternat.

What is genus most generall?

It is that which in no respect can be species, as these, Substãce, Quantity, Quality, and al the rest of the ten predicaments, which be the highest kindes comprehending all other kindes, and are comprehended of none.

What is that which you call subalternat?

It is ỹ which in diuers respects may be both genus & species, as these, animal or sensible body, stone, tree, fishe, bird: which being compared to their superiors, as to substance or bodie, be speciall kindes: but if to their inferiors, as this word sensible body being compared to man or horse, or this word stone to a flint or Dyamond, or this word tree to an Apple tree or Peare tree, or this word fish to a Salmon or Pickerell, or this word Bird to a Mayns or Goldfinche, and such like, then they be generall kyndes. The order of all which kindes, aswell generall as subalternat, as also most especiall, you may see here in the table following, taken out of ỹ predicamẽt of Substance: in ẽ table, substãce is ỹ highest

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or most generall kind, vnder which are placed the lesse generall or especiall kinds, according as they be in degrees high or lowe, nigh or farre from substance. Moreouer on each side of the generall kyndes are set downe in this table, the differences whereby the said generall kyndes are diuided euery one into those lesse kindes which it comprehendeth, and the like table may be made of all the rest of the Predicaments.

A Table shewing the order and degrees of generall kindes and especiall kindes, taken out of the predicament of substance.

Differences.	generall & speciall kindes.	differences.	Examples.
	Substance is eyther		an Angell.
with bodie		or without body, as	a Spirite.
			the soule of a man separated from the bodie.
Compound of the 4. elements, as all naturall bodies and vnnaturall.	If with body, it is eyther		
		or simple, as	the 11. heauens.
			the 4. Elements.
	Body cõpound is eyther	or vnliuing, as	stones,
			metalls,
			liquors.
Lyuing	Againe the liuing bodie is eyther		
Sensible		or vnsensible as	tree.
			herbe.
			shrubbe.
Reasonable, as man.	The sensible body called in Latine Animal, is eyther	or vnreasonable as	Fower footed beasts, creeping beasts, fish, fowle, or birde.
	The reasonable bodie is man, called in latine homo, which is a most especiall kinde	as	Socrates, Plato, & euery other singular man.

Bucephalus is the proper name of great Alexander his horse: and London is the proper name of the chiefest cittie in England.

What is indiuiduum demonstratiuum?

Indiuduum demonstratiuum, which is as much to say, as shewing or poynting, is a common word or name ioyned with a Pronowne demonstratiue, to signifie some one certaine thing onely, as whē we say this man, or that horse: and indiuiduums demonstratiue be more readie to signifie particular things, aswell in accidents as in substances, then are Indiuidua determinata: for This or That, and such like pronownes, doe poynt out a thing, as it were with the finger, when proper names often times do fayle, yea the Pronowne demonstratiue is of such force, as being ioyned to the most generall word that is, maketh it Indiuiduum, aswell as when it is ioyned to the most especiall, for this substance or this bodie is Indiuiduum, aswell as this man or that horse.

What is Indiuiduum vagum?

Indiuiduum vagum, that is to say, wandering or vncertaine, is a word betokening some one certaine thing, but not certainly, as when I say, there was a certaine man heere to seeke you: by this speeche is meant but one man, & yet vncertaine who it was: and therefore to make the thing more certain, we vse to adde some token or mark, as we reade in the Acts of the Apostles, There was a certain man which was halt & lame from his mothers wombe, whome they laide daylie before the gate of the Temple &c. And note that like as we do vse indiuidua, demōstratiua, & determinata, in declaring things either present, or certainly knowne: so in speaking of thinges absent or vncertainely knowne, wee expresse our myndes oftentimes by indiuidua vaga.

What is indiuiduum ex hipothesi?

Indiuiduum ex hypothesi, that is to say, by supposition is a word which of his owne natural signification being common and vniuersal, is made notwithstanding by supposition a singular word and to signifie but one thing onely: as for example, this word, the Sonne of Marie is a common terme, and yet by supposition is made to signifie none but Christ onlie: likewise when we say the Greeke Poete, we meane none but Homere.

Of words vniuersall or generall. Chap. 4.

What words are said to be vniuersall or generall?

Those words are said to be vniuersall which are spoken of many things, ỹ is to say, which may be applyed

plyed to many things, or comprehend many things, as this word animal (which is as much to say as a sensible body) comprehendeth both man, brute beast, fish, fowle, birde, and euerie thing els that hath feeling and mouing.

How are such words diuided?

Into Predicables and Predicaments.

Of the fyue Predicables.

WHat call you Predicables?

Predicables are certain degrees, or rather petigrees of words that be of one affinitie, shewing which comprehend more, and which comprehend lesse.

How manie such be there?

There be fyue, that is to say, Genus, Species, differentia, Proprium & Accidens: which may be englished thus, generall kinde, speciall kinde, difference, propertie and accident. But we thinke it best to begin first with species, because it is next to Indiuiduum.

Of the speciall kynde called in Latine, *Species*.

WHat is Species?

Species is a speciall kinde, which is spoken of many things, that is to say, it comprehendeth manie thinges differing onlie in number in asking the question, what the thing is: as when I aske, what is John: it is rightly answered to say, a man: for this word (man) is an vniuersall word comprehending both John, Thomas, Robert, and all other singuler men.

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What is that which you call subalternat?

It is ỳ which in diuers respects may be both genus & species, as these, animal or sensible body, stone, tree, fishe, bird: which being compared to their superiors, as to substance or bodie, be speciall kindes: but if to their inferiors, as this word sensible body being compared to man or horse, or this word stone to a flint or Dyamond, or this word tree to an Apple tree or Peare tree, or this word fish to a Salmon or Pickerell, or this word Bird to a Manys or Goldfinche, and such like, then they be generall kyndes. The order of all which kindes, aswell generall as subalternat, as also most especiall, you may see here in the table following, taken out of ỳ predicamẽt of Substance: in w̃ table, substãce is ỳ highest

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A Table shewing the order and degrees of generall kindes and especiall kindes, taken out of the predicament of substance.

Differences.	generall & speciall kindes.	differences.	Examples.
	Substance is eyther		
with bodie		or without body, as	an Angell. a Spirite. the soule of a man separated from the bodie.
Compound of the 4. elements, as all naturall bodies and vnnaturall.	If with body, it is eyther	or simple, as	the 11. heauens. the 4. Elements.
Lyuing	Body cõpound is eyther	or vnliuing, as	stones, metalls, liquors.
Sensible	Againe the liuing bodie is eyther	or vnsensible as	tree. herbe. shrubbe.
Reasonable, as man.	The sensible body called in Latine Animal, is eyther	or vnreasonable as	Fower footed beasts, creeping beasts, fish, fowle, or birde.
	The reasonable bodie is man, called in latine homo, which is a most especiall kinde	as	Socrates, Plato, & euery other singular man.

Of difference called of the Latins *differentia*.

WHat is difference?

Anſ. Difference is that whereby thinges dot differ one from another, or any thing from it ſelfe.

How many kindes of differences be there?

According to Porphirius there be three kinds (that is to ſay) common, proper, and moſt proper or eſpecial, called of the Latins differentia ſpecifica.

What call you a common difference?

A common difference is ſome ſeperable accident, whereby one thing differeth from another, or from it ſelfe: as a hotte Man from a cold, or a man ſtanding from himſelfe ſitting.

What is proper difference?

A proper difference is ſome inſeperable accident, whereby one thing differeth from another or from it ſelfe, as the Swanne by whitenes differeth from the Crow, the gray eyed man from another man that hath blacke eyes, or from himſelfe, as hauing now an vnremoueable ſcarre in his face, whereas before hee had none.

What is the moſt proper difference?

The moſt proper difference only receiued and allowed of the Logitians, is that which is ſpoken of many thinges differing in kinde or number, in aſking the queſtion what manner of thing any thing is, as this word reaſonable or vnreaſonable: for if I aſke the queſtion what manner of thing this man or that man is, as Iohn, Thomas, or Richard, &c. it is rightly anſwered to ſay, a reaſonable body. Likewiſe if I aſke what manner of thing a horſe is, it is truely anſwered to ſay an vnreaſonable body, for theſe be the moſt proper and eſpeciall differences, whereby men & brute beaſtes doe differ one from another.

How manifold is the office of a Logicall difference?

Twofold, the one to deuide the generall kinde into his eſpeciall kindes, and the other to conſtitute or make the ſelfe ſame ſpeciall kindes: wherfore ſuch differences are ſaid in diuers reſpects to be ſometimes diuiſiue, and ſometime conſtitutiue, yea, & ſometime both: as theſe differences, corporate and vncorporate, liuing and vnliuing, ſenſible and inſenſible, reaſonable, & vnreaſonable, which in that they doe deuide ſome generall kinde into other kindes, either more ſpeciall or not ſo generall, they may be called differences diuiſiue: but in that they conſtitute or make a-

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ny speciall kinde, as this difference reasonable beeing added to a sensible body, maketh the speciall kinde, man: such difference may be well called a difference constitutiue, or rather specificatiue, as the former table of generall kinds and differences, doth plainly shew.

What other deuision doe the Schoolemen make of this Logicall difference?

They say that of these differences some do extend further then some, for some may be applyed to many speciall kinds, as liuing, and vnliuing, sensible and vnsensible, and also the differens vnreasonable, but the difference reasonable can bee applied but to one speciall kinde only, which is man.

Of Propertie called in Latine *Proprium*.

WHat is propertie?

It is a naturall inclination or propertie incident to one especiall kinde, which is to bee vnderstood foure manner of waies.

Shew how.

First it is called Proprium, which is proper to one only kind. but not to the whole kind, as to be a Poet or Musitian is proper to man but not to euery man: Secondly, it is called proper that belongeth to al the kind, but not to that kind alone: as to be two-footed, belongeth to al mankind, but not to that kind alone: for al flying fouls are also two footed: Thirdly, it is said to be proper when it belongeth to one only kinde and to all that kind, but yet not alwaies: as to be hore headed or bald, is proper to man in old age, but yet not alwaies: Fourthly it is said to bee proper or rather most proper, which is incident to one kinde alone, to all that kinde and alwaies, as to haue a naturall aptnes to laugh or to speake is proper to man only, to euerie man, and alwaies, and therefore this kinde of propertie is said to be conuertible, with the kinde whereunto it belongeth, as whatsoeuer hath naturally power to speake or laugh, the same is man, and whatsoeuer is man, the same hath power to speake or laugh.

Of an accident, called in latine *Accidens*.

WHat is an accident?

An accident is a voice or worde signifying thinges casuall, cleauing to substances or subiectes, without

which

which subiects they haue no being at all, and it is thus defined. An accident is that which may be absent or present without corruption of the subiect whereto it cleaueth, because it is no substantial part of the subiect, and of such accidents some be called separable, and some vnseparable.

What is a separable accident?

A separable accident is that which may bee easily separated from the subiect, as outward heate or cold from a mans body, whitenes or blackenes from a wall.

What is an vnseparable accident?

An vnseparable accident is that which cannot bee separated from his subiect in deede, but onely in thought or imagination, as heate from the fire, heauines from lead. And such accidents be eyther incident to certaine subiects, or substances in particular, as some men to be gray eyed, or red headed, or els to some whole kinde in generall, as to all Rauens to bee blacke, and all Swannes to be white.

Of the manifold vses of the aforesaid fiue predicables.

TO how many vses doe the predicables serue?

To these foure necessary vses: First they shew which words doe comprehend more or extend furthest, and which comprehend lesse or least, and what affinitie is betwixt word and worde, so as in making any definition, a man may easily perceiue how euerie word ought to be expounded one by another, (that is to say) the lesse common by that which is more common, as if you would define a Spaniell, you must say that he is a dogge: for this word dogge is a more common word then Spaniell, because it comprehendeth both Spaniell, Grayhound, Hound, Cur, Mastiffe, and euerie other kinde of dogge: Secondly, they shew the nature of propositions which be necessarie, and which bee casuall or accidentall.

Which call you necessarie, and which casuall?

That proposition is said to be necessarie, whereof the predicat is eyther a generall kind, a speciall kinde, a speciall difference or propertie, and is necessarilie coupled to his subiect, as when I say Iohn is a sensible body, Iohn is a man, Iohn is reasonable, Iohn is apt to speake.

When is a proposition said to be accidentall?

when the predicat is an accident, as when I say Iohn is learned

learned or vnlearned, white or blacke: Thirdly, they yeeld matter meete to make definitions and diuisions: for Logicall definitions bee made of the nighest generall kindes ioyned together, with their true differences or properties: as in defining a man, wee say that man is a sensible body endued with reason, and in making diuisions we either deuide the generall kindes into their especiall kindes, as a sensible body into man and brute beasts, or the speciall kindes into their Individuums, as man into John, Thomas &c. or els we deuide subiects into their accidents, as of men some be free, and some be bound and such like: Fourthlie, they help much towards the inuention of arguments, for arguments be fetched from the common places as from the generall kinde, the speciall kinde, the difference, the propertie, and from other like places of inuention, as shall be taught hereafter in his proper place, and note that of these predicables do spring certaine predications, whereof we come now to speake.

Of Predication and of the diuers kindes thereof. Cha. 5.

WHat is predication?

Predication is a certaine kinde or phrase of speech, whereby one word is spoken of another, and aptlie applied to another, as when we say, John is a man, for this word man is a generall word, and is spoken of John, Thomas, Richard and euery other singular man.

How many kinde of predications be there?

Two, that is essentiall and accidentall.

What is essentiall predication?

It is a naturall & vsuall kinde of speech, whereby one thing is naturally & properly spoken of another, or as the Logitians say, whē words superior are spokē of their inferiors being of one self affinity, as when the generall kind is spoken of any his speciall kindes, or the speciall kinde of any his Individuums, or when the difference or propertie is spoken of their speciall kindes, or of any of the Individuums comprehended vnder the laide speciall kinds, as when we say, man is a sensible body, or that John is a man, or John is reasonable, or John is apt to speak, or such like: for such speeches are both naturall and of necessitie, because the predicat is aptly applied to his subiect. To this kinde of predication some men doe also referre two other kindes of speeches.

Which be they?

Predication, Identicall, and vnusuall.

What is Identicall predication?

It is a kinde of speech whereby one selfe thing is spoken of it selfe, as when we say, John is John, which though it be essentiall, yet because nothing is expounded, thereby it is not allowed of the Logitians.

What is vnvsuall predication?

It is a kinde of speech seldome vsed, as when wee read in the holy scriptures, God is man, the word was made flesh, for these be most essentiall and necessarie speeches, though not vsuall in any other scyence then in diuinitie.

What is predication accidentall?

Predication accidentall is when an accident is spoken of his subiect, as wine is sweet or wine is sower, Socrates walketh, for this is a casuall kinde of speech, imploying no necessity as do the other essentiall or naturall speeches before recyted. To this also may be referred predications by way of similitude, as when wee say, one man is a God or diuell to another. A tyrant is a wolfe or Fore (that is to say) like a wolfe or Fore, which are otherwise called figuratiue or metaphoricall speeches: But whilst wee talke here of accidentall predications, it shall not bes amisse to shew you that the Schoolemen the more distinctly to expresse the nature of accidents doe vse two termes Abstractum & Concretum. Abstractum is the bare shape of any subiect seperated by Imagination from the same: as the whitenes or blacknes of a wal, or any other thinge that is eyther white or blacke, which abstract cannot be properly spoken of his subiect, for it were no proper speach to say that this wall is whitenes, wherfore we must vse the adiectine called concretum, signifying the shape, together with the subiect, as when we say, this wall is white.

Of Predicaments. Chap. 6

What are Predicaments?

Predicaments are certaine titles or tables conteining all thinges that be in the world: for euery thing whatsoeuer it be, is eyther a substance or accident, and if it be a substanc it is found in the table of substance hereafter following: if it be an accident it belongeth eyther to quantity, quality, relation, action, Passion, time, place, to lee scited or to haue. For these be the tables of accidents, in one of the which euery accident is easie to be found: so that in all there be x. Predicaments

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or tables, one of substance and nine of accidents, and these bee called the highest and most generall kindes, albeit there bee others in deede higher then they, called of the Schoolemen Transcendentia, (that is to say) surpassing, as these, Res, ens, vnum, aliquid, verum, bonum: which may be Englished thus, a thing, a being, one, somewhat, true, good: but forsomuch as these bee not spoken of the other higher kindes according to one selfe signification, but may be diuerslly applied, they are excluded from the order of Predicaments.

What other words are excluded from the order of Predicaments?

All compound words, called of the Schoolemen Complexa, as godman, Plato disputeth: and all doubtfull words hauing diuers significations otherwise called Equiuokes, and also tearmes of Art, as a Noune, a Pronoune, a Verbe, which bee tearmes of Grammer, and as genus, species, differentia, which bee tearmes of Logike and such like: which tearmes of Art are called of the Schoolemen, names of the second intention as hath bin said before. Notwithstanding differences constituting especiall kinds doe belong to the Predicament of the same speciall kindes, & the parts of any whole thing doe belong to the Predicament wherin the whole is contayned: and first, principles do belong to the predicament or table of those thinges whereof they be principles, as a point or pricke belongeth to the predicament of quantity, all which shall be plainely declared vnto you immediatly after that we haue somewhat talked of those things, which the schoolemen call antepredicamenta (that is to say) forepredicaments.

Of forepredicaments. Chap. 7.

WHat meane you by forepredicaments?

Forepredicaments be certaine definitions, diuisions, and rules taught by Aristotle before the predicamentes, for the better vnderstanding of the same, and therefore are called antepredicamenta (that is to say) forepredicaments.

What, and how many thinges defineth he?

Three, that is, Equiuokes, Uniuokes, and Denominatiues.

What call you Equiuokes?

Equiuokes be such things as haue one selfe name, and yet be diuers in substance or definition, as a naturall dogge, and a certaine starre in the firmament are both called by one name in Latine Canis, yet they be nothing like in substance, kinde or nature,

& note ỳ the scholemen do call the word or name it self Equiuocum Equiuocans, and the thing signified by the word Equiuocum, Equiuocatum. They make also two kindes of Equinokes, that is Equiuokes by chance, and equiuokes of purpose. The first is whē one selfe name is giuen to many things by chance, and not for any likenes that is betwixt them, as in English this worde hart signifieth as well the hart of a man or beast, as a certaine beast called a Hart in the Forrest. The second is when one selfe name is giuen to diuers thinges of purpose, for some likenes that is betwixt them, as a painted man is called man as well as the liuing man, for we will commonly say, here is King Henry the eight, when indeed it is but his picture: but yee must note that all Equiuokes being generally pronounced without addition, ought to be vnderstood according to their chiefe and most principall signification, as this worde man being generally spoken, ought to be taken for a liuing man, and not for a painted man: but no equiuokes ought to be placed in any predicament, neither can it be defyned vnlesse it be first brought to one certaine signification, and therfore all Equiuokes are vtterly barred from al manner of Discipline.

What call you Vniuokes?

Vniuokes be those things that haue one common name which is spoken of them essentially, or really, as a man, a horse, a Lyon, whose common name is Animal, or sensible body, for in asking what eyther of them is, it is rightly answered to say Animal. And I say, here really, because it is not enough for Vniuokes to haue a common name, vnles the same be also reall or essentiall, whereby are excluded all common names or vnderstandings that bee accidentall: for though white or blacke, swift or slow, or such like is a common name, and is commonly applied both to man and beast, yet that is accidentally, and not really or substantially: Moreouer the Schoolemen doe call the common word it selfe Vniuocum Vniuocans, and the thing signified by the word Vniuocum Vniuocatum.

What call ye Denominatiues?

Denominatiues are those accidents that be of like name, and differ onely in case or finall termination: as humble, humilitie, proud, proudnesse: for of humilitie a man is said to be humble, & of pride to be proud, and according to the Schoolemen, that word whereof the name doth spring, is called Denominator, & the name it selfe Denominatiue, & the thing or person so called, the Denominated, as if I should say, of valiantnesse Peter is said to be valiant: here valiantnes is the Denominator, valiant the Denominatiue,

minatiue, and Peter the Denominated: for Peter is the subiect whereunto the Denominator doth cleaue. The Grammarians doe call the Denominator Abstractum, that is a substantiue, & the Denominatiue Concretum, that is an Adiectiue.

To what end doth Aristotle chiefly vse these definitions?

To shew the differences of predications or kindes of speeches, which are to be allowed, and, which not: againe to know which be predications essentiall, and which bee accidentall: for according to the three definitions before rehearsed, there be three predications, that is to say, predication Equiuocal, vniuocall, & denominatiue.

What is predication equiuocall?

Predication equiuocall is when the equiuoke is spoken of any of the thinges that it signifieth, as to say, his Letter was a Letter of the matter meaning perhaps a hinderer of the matter, but such kinde of speeches ought to be reiected from all good discipline, as hath bin sayd before.

What is predication vniuocall?

It is when the generall kinde is spoken of his especiall kinds, or the especiall kinde of her inferiors, or the speciall difference of that speciall kinde which it maketh, or of the Individuums contained vnder the same speciall kinde, as when wee say, man is a sensible body, man hath reason, or John is a man.

What is predication denominatiue?

It is when some accident is spoken of his subiect, as when we say, Peter is proud, humble or valiant.

What and how many deuisions be there?

Two, the first diuision is touching wordes simple and compound, whereof though we haue said somewhat before, yet it shal not grieue vs heere againe to set it downe in such order as the Logitians vse.

Shew how?

Of wordes some be simple, called in latine Incomplexa, and some be compound called Complexa. Simple wordes be distinct and seuerall words not set together by any rule of Grammer to make any perfect sentence, as good, iust, a man, a horse, to stand, to go: Compound words be words significatiue, which are ioyned together by rules of Grammer to make some perfect sentence, as Iohn is learned.

What is the second deuision?

The second deuision is foure fold as followeth: First of things that be, some be spoken of a subiect, and yet bee in no subiect: as man, horse, and such like vniuersall natures or substances: for they be no accidents: Secondly, some be in a subiect, and yet be

not

not spoken of any subiect as all particular accidentes, as this or that colour, for these be Indiuiduums, and therefore not predicable: Thirdly some be in a subiect, and also be spoken of a subiect, as all vniuersall accidents, as Science, Gramner, Logike and such like: for of these some be general, & some be special kinds and therefore are said to be predicable accidents: Fourthly, some be neyther in a subiect nor spoken of a subiect, as Iohn, Thomas, this man, or that man, this horse or that horse, for these be first natures or substances, and therefore are subiectes themselues not predicable.

Whereto serueth this diuision?

By this diuision yee may learne the diuersitie of these two speeches, to be spoken of a subiect and to bee in a subiect: for to be spoken of a subiect is to be spoken really or essentially of some thing that is part thereof, as this word animal or sensible body is really spoken of man, horse, & of euery other thing that hath life, and feeling, for they be substantiall parts of that generall kinde, for if it be demanded what a man or horse is, it is rightly answered that he is a sensible body: but to be in a subiect is to bee spoken of another thing accidentally, and not essentially, as this word white or blacke is spoken accidentally of man, or of any other subiect and not essentially, for neyther is man any essentiall part of white, nor white any essentiall part of man, and therfore cannot be in man or in any other subiect but accidentally: and for that cause it is spoken of his subiect accidentally, and not reallie.

Now tell how manie, and what those rules be, whereof you spake before?

There be two rules, the first is thus, when one thing is spoken of another essentially as of his subiect: then whatsoeuer may be spoken of that predicat, must needes bee also really spoken of the same subiect: for as this worde sensible body is spoken of man or horse essentially, as when wee say that man is a sensible body: so this word liuing body, being spoken essentially of a sensible body, as when we say that euery sensible body is a liuing body, is also as really spoken of the foresaid subiect man, in saying that man is a liuing body, for this worde liuing body is a more generall kinde then sensible body is.

What is the second rule?

The second rule is thus, diuers generall kindes not contained one of another, nor both of a third haue diuers speciall differences which doe make diuers speciall kindes, as a sensible body and science, for the speciall differences of a sensible body are these: reasonable, and vnreasonable, making both man & brute

beast:

beast: but the differences of science be these, contemplatiue & disputatiue and such like, whereby are made speciall kinds of knowledge: for the difference contemplatiue maketh naturall Philosophie, and the difference disputatiue maketh Logike.

To what end serue these rules?

To the end it might be easily knowne what words are of affinity, and which be of one selfe predicament and which not: Thus farre as touching forepredicaments, now to the predicamentes themselues, and first we will speake of substance.

Of Substance, Chapter 8.

WHat is substance, and how manie kindes of Substances be there?

Substance is a thing consisting of it selfe, and needeth no help to sustaine the being thereof: and yet it is clad with accidents, for otherwise we could not discerne with our outward senses, whether it were a substance or not, for wee cannot see the substance of any thing with our bodily eyes, but onely with the eyes of our minde and vnderstanding, but we may see the figure, the quantity, the colour and such like accidentes cleauing to the substance, without the which those accidents haue no being at al, and therefore in seeing such accidents, we may assure our selues that there is a substance sustaining those accidentes which doth alwaies remaine though the accidents doe faile or change neuer so often. As for example, we see in water that though it be sometime hot, and sometime cold, now of one colour, and now of another, yet the substance of water doth still remaine, so as wee may perceiue those accidents to be one thing, and the substance of water to be another. Now as touching the kindes of substance according to Aristotle there be two, that is, first and second.

Which call ye first substances?

First substances be those substances which the Logitians call Individua, as John, Thomas, this man, or that man, this horse or that horse, & by reason of their accidents are to bee discerned with outward senses.

Which call you second substances?

Second substances are those which they call speciall kindes, & generall kindes, as man, a sensible body, a liuing body, and such like, which are to be comprehended only by mans reason: And be not subiect to our outward senses as first substances be, & these

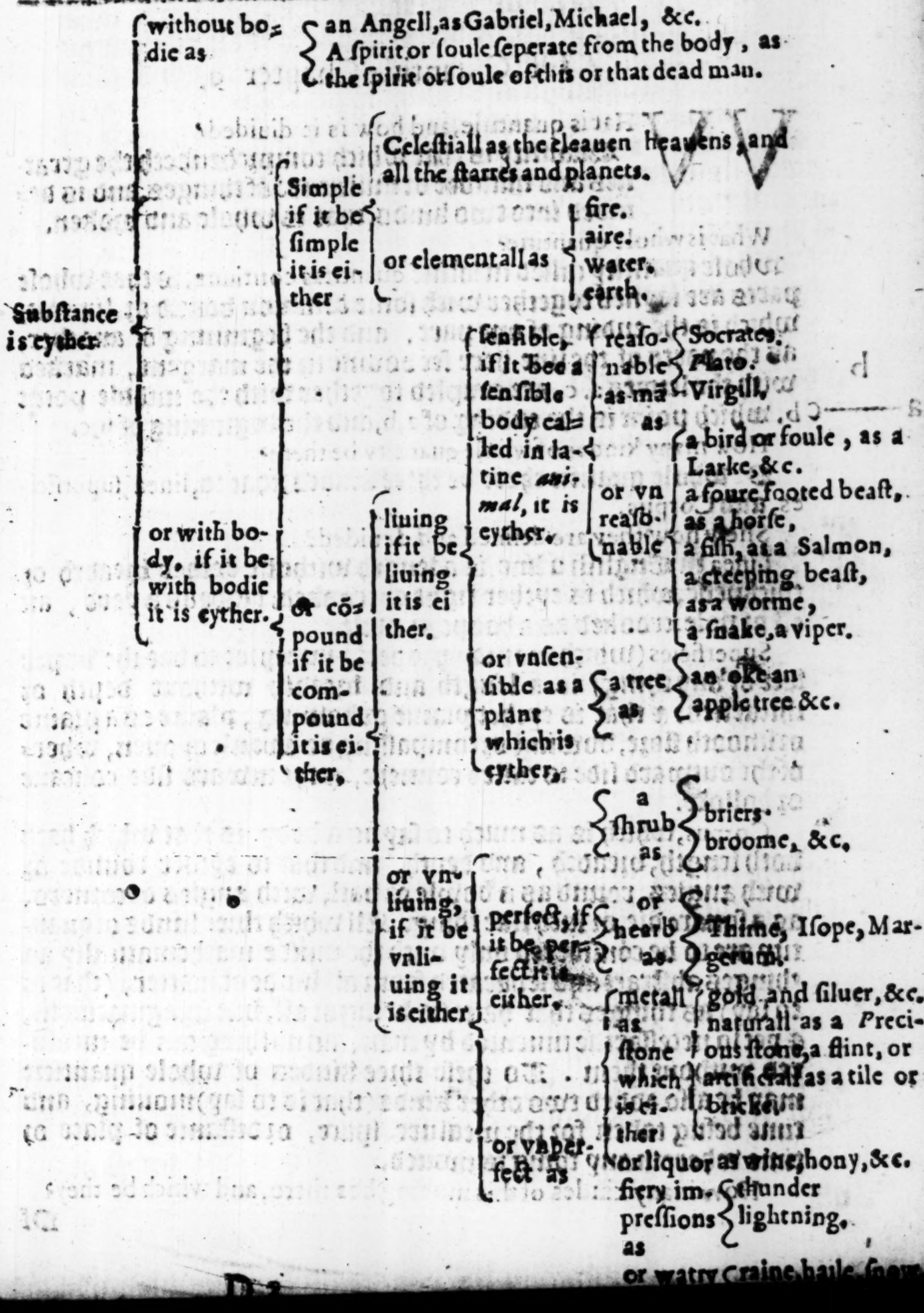
second substances are otherwise called of the Schoolemen vniuersall natures.

How many properties doe belong to substance?

These three, first substance is contained in no subiect, as an accident is, for though the parts of a mans body be contained in the whole, yet euery such part is a peculiar body or substance, & hath his proper being of it self as well as the whole, whereas accidents without substance haue no being at all: Secondly, substances are said to be diuerse, but not contrarie one to another, for neyther is fire as touching his substance contrarie to water, nor the wolfe contrary to the Lambe, but onely in respect of their quality, wherevnto contrariety doth properly belong: Thirdlie, of substances one cannot bee more or lesse then another, for the greatest Giant as touching substance is no more a man then the least dwarfe that is, neyther is a man full growne more a man then a child newly borne: for more or lesse appertaineth properly to quantity and not to substance. But if you will vnderstand how far the Predicament of substance doth extend, and what it comprehendeth, consider well this table following, whereby you may learne how to define any kind of substance whatsoeuer it be, for there you shall finde all the kindes both generall and speciall together with their differences most plainely set forth.

THE

The Table of Substance



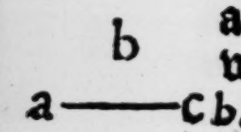
Of Quantitie Chapter 9.

WHat is quantitie, and how is it diuided?

Quantity is that which comprehendeth the greatnes and number or multitude of thinges, and is deuided into two kinds, that is whole and broken.

What is whole quantitie?

Whole quantity called in latine quantitas continua, is that whose parts are ioyned together with some common bound or limmis, which is the ending of one part, and the beginning of another, as the parts of the line here set downe in the margent, marked with the letters a. c. are coupled together with the middle point b. which point is the ending of a,b, and the beginning of b,c.



How many kindes of whole quantity be there?

Of whole quantie there be three kindes, that is, linea, superficies, and Corpus.

Shew how they are defined and deuided?

Linea in English a line, is a length without eyther breadth or thickneſſe, which is eyther right or crooked, right as a yard, an ell or pole, crooked as a hoope or circle.

Superficies (which we may properly interpret to bee the vpper face of any thing) is a length and breadth without depth or thickenes: & that is eyther plaine or bowing, plaine as a plaine or ſmooth floze, bowing or compaſſing as a vault or ouen, whereof the outward ſide is called conuexe, & the inward ſide concaue or hollow.

Corpus, which is as much to ſay as a body, is that which hath both length, breadth, and depth, and that is eyther rounde or with angles, round as a bowle or ball, with angles or corners, as a ſquare die, or ſuch like thing. All which three kinds of quantity are to be conſidered only with the minde mathematically as thinges abſtract and ſeparated from all kinde of matter, (that is to ſay) as thinges that haue no being at all, but imaginatiuelie, & yet ſo neceſſarilie inuented by man, as nothing can be meaſured without them. To theſe three kindes of whole quantitie may be alſo added two other kinds (that is to ſay) mouing, and time being taken for the meaſure, ſpace, or diſtance of place or time wherein any thing is moued.

How many kindes of this mouing bee there, and which be they?

Of

Of this mouing there be three kindes, that is right, circular, and mixt: The right belongeth to the foure elements, and to bodies without life: for their naturall mouing is either right vpward, or els right downward, as the fire whose proper mouing is alwaies to ascend right vp, and the mouing of a stone, or such like heauy thing is to fall right downeward: for according to the rules of Philosophy all light thinges doe moue vpward, and all heauy thinges downeward: Circular or round mouing belongeth to the heauens and celestiall bodies, which doe turne round like a Cart wheele: The mixte mouing (that is to say) partly right, and partly round, belongeth to all liuing beastes, that goe sometime forward, sometime backeward or sidelong, sometime vpward, and sometime downeward.

How is time deuided?

Time is deuided into three kindes, that is, into time past, time present, and time to come, and vnder time are comprehended yeares, monethes, weekes, dayes, howres, and all other wordes signifying distance or difference of time.

What is broken quantity?

Broken quantitie called of the Latins quantitas discreta, is that whose parts are not ioyned with any common bounde or limmit, but be loose and seuerall one from another, which quantitie is deuided into two kinds, that is number and speech.

What is number, and how is it deuided?

Number is a multitude or summe of vnities or ones gathered together, and such number is either simple, respective, or figuratiue: Simple, as, two, three, foure, fiue, &c. Respective as halfe, double, treble, quadruble, and such like: Figuratiue as a three square or foure square number, like to these here figured ∴ :: and such like.

What thinges are comprehended vnder broken quantitie?

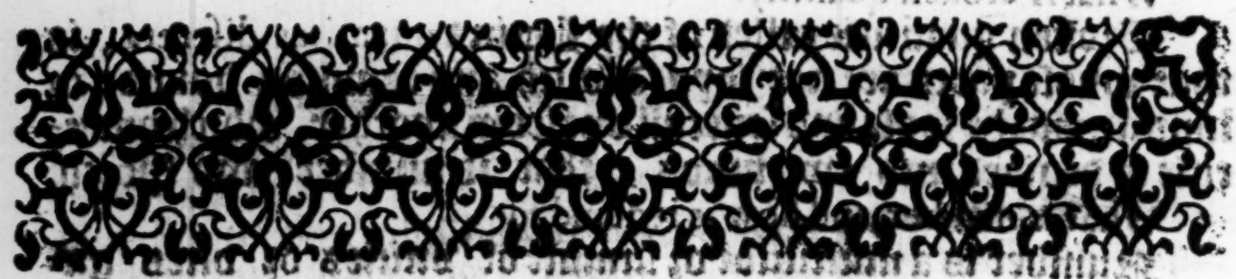
All names of measures whereby we measure any thing either drie or liquid, as gallon, quart, pint, bushell, pecke, pound, dram, scruple graine, &c.

How is speech here taken?

Speech is taken here for the measure or quantity of sillables, whereof some bee long, and some be short, and such quantitie is to bee considered either in harmonie, in rithme, or verse, of which thinges the generall and speciall kindes together, with the rest that haue bin said touching quantitie are orderly set forth in the table of quantity here following.

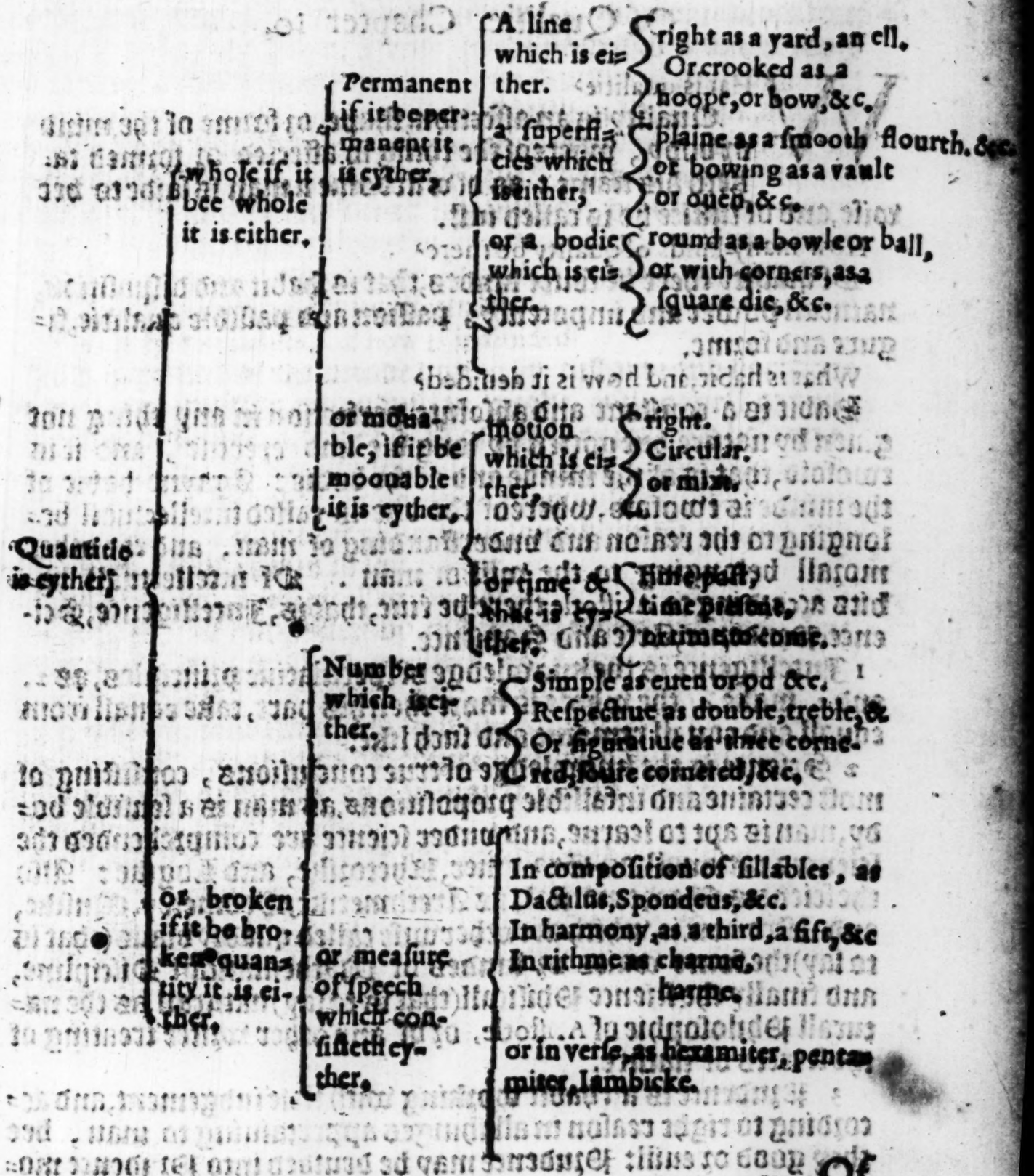
What and how many properties doe belong to quantitie?

To quantitie belongeth three properties: First to haue no contrarietie: for greene shall be not of themselues contrarie, but only by way of comparison: Secondly to be greater or lesser, but not more or lesse spoken adverbially, for a little quantitie is a quantity as well as the greatest quantity of all: The third and chiefest property of quantity is to be equall or vnequall.



The

The Table of Quantitie.



Of

Of Qualitie. Chapter 10.

WHat is qualitie?

Quality is an affection, shape, or forme of the mind or body, whereof the thing so affected or formed taketh his name: as of wisedome a man is saide to bee wise, and of iustice he is called iust.

How many kinds of quality be there?

Of quality there be foure kindes, that is, habit and disposition, naturall power and impotency, passion and passible qualitie, figure and forme.

What is habit, and how is it deuided?

Habit is a constant and absolute perfection in any thing not giuen by nature, but gotten by long vse and exercise, and it is twofold, that is of the minde and of the bodie: Agayne habit of the minde is twofold, whereof the one is called intellectuall belonging to the reason and vnderstanding of man, and the other morall belonging to the will of man. Of intellectuall habits according to Aristotle there be fiue, that is, Intelligence, Science, Prudence, Arte and Sapience.

1 Intelligence is the knowledge of speculatiue principles, as 2. and 2. make 4. the whole is more then his part, take equall from equall and equall remaine and such like.

2 Science is the knowledge of true conclusions, consisting of most certaine and infallible propositions, as man is a sensible body, man is apt to learne, and vnder science are comprehended the sciences rationall, as Grammer, Rhetorike, and Logike: Also the sciences Mathematical, as Arethmetike, Geometry, Musike, and Astronomie, which are otherwise called quadriuialls (that is to say) the foure wayes or kindes of Mathematicall Discipline, and finally the science Philicall (that is to say) naturall, as the naturall Philosophie of Aristotle, or of any other writer treating of the secrets of nature.

3 Prudence is an habit working with true iudgement, and according to right reason in all thinges appertaining to man, bee they good or euill: Prudence may be deuided into Prudence monasticall, domesticall, and politicall: Monasticall teacheth to gouerne one sole person: Domesticall to gouerne a houshold or family, and politicall to gouerne a common wealth.

Arte

4. Arte is an habite of knowledge consisting of assured and certaine rules, tryed and approued by experience, and learned by exercise, teaching to doe or to make something that is profitable to mans behoffe, and Art comprehendeth all arts, both liberall and mechanicall, that is to say, handie crafts. 5. Sapience consisting both of intelligence and of science, is the head and chiefe of those knowledges that be most honorable in Nature, comprehending two notable Sciences, that is, the Christian Diuinitie, and the Philosophers Diuinitie, otherwise called Metaphysicall, that is, supernaturall. And all these intellectuall habites are contayned vnder a certaine and most sure knowledge, which is alwayes true, for vncertaine knowledge is sometime true, and sometimes false: whereto belongeth opinion, suspition, coniecture, and such like. Thus much of habite intellectuall.

What is morall habite, and how is it diuided?

It is a qualitie of the minde gotten by custome and doctrine: teaching and inuiting mans will to worke, either well or euil, and is twofold, that is, either good or euill: to the good belong al kinde of vertues, as Iustice, liberalitie, fortitude, temperance, &c. to the euill all kinde of vices, as pride, couetousnes, cowardlines and such like. And note that of vertues, some be called morall, and some theologicall, that is to say, diuine.

Which call you theologicall or diuine?

Those that be not gotten by custome or mans industry, but are the meere gifts of God, as Faith, hope, and perfect charitie, and all other gifts of the holy Ghost, as the gifts of the tongues, of prophesying, of healing, and such like: which some do attribute to habite infused, making a difference betwixt habite infused and habite acquired or gotten, as you may see in the table following.

What is habite of the bodie?

Habite of the bodie is a certaine aptnes and agilitie of doing any thing with the bodie, not giuen by nature, but gotten by custome and exercise, as to ryde well, to run, to leape, to daunce, to wrestle, to shoote, to fence, to dart, to swym, to write, to paynte, and such like.

The Table of Habite

- Habite is eyther
  - Of the bodie, as
    - To fence,
    - To dart,
    - To shoote,
    - To wrestle.
  - or of the mind, if it be of the mind, it is eyther
    - Infused as
      - Faith,
      - Hope,
      - Charitie.
    - or acquyred, if it be acquired it is eyther
      - Intellectual, intellectual cõprehẽdeth both
        - Knowledge certaine, if it be certain it containeth the intellectual habites before defined, that is
          - Intelligence.
          - Science which is
            - rationall, as
              - Grammer,
              - Logike,
              - Rherorike.
            - mathematicall as
              - Arithmetike
              - Geometrie,
              - Musike,
              - Astronomie.
            - Physicall, as
              - Knowledge of the secrets of Nature and of the Soule.
          - Prudence is eyther
            - Monasticall,
            - Domesticall
            - Politicall, which are before defined.
          - Art is eyther
            - Liberall, as
              - Husbandrie,
              - Architecture.
            - Or mechanicall, as
              - Taylors craft,
              - shoomakers craft
              - carpenters craft.
          - and Sapiẽce which containeth both
            - Christian Diuinitie, and also philosophers Diuinitie, otherwise called Metaphysicall and supernaturall wisedome.
        - and knowledge vncertaine, as
          - Opinion,
          - Suspition,
          - Coniecture.
      - or Morall, which comprehendeth both
        - vertue as
          - Iustice,
          - Fortitude,
          - Temperance &c.
        - and vice which is eyther
          - by excesse as
            - rashe boldnes,
            - Prodigalitie.
          - by defect as
            - Cowardlines,
            - Couetousnes.

What is diſpoſition, and how is it diuided?

Diſpoſition is an habite begun, but not perfited, and it is eyther of the body or of the minde: for to diſpoſition may be referred whatſoeuer was before attributed to habite (perfection in the thing only excepted) in which they differ for lacke of continuance, by reaſon whereof, Diſpoſition is ſaid to be eaſily remoued, but habite not ſo, becauſe it is throughly grounded: as for example, of the diſpoſition that a man hath to learning, he is ſaid to be ſtudious: but of perfect habite gotten by continuall ſtudie in learning, he is ſaid to be learned, which importeth a perfection, which is more then a Diſpoſition.

Of naturall power and impotencie, the ſecond kinde of Qualitie.

VVHat is naturall power?

It is a naturall habilitie to doe, to ſuffer, or to reſiſt, not gotten by exercise, but giuen by nature to the mind or bodie: to the minde, as to haue a good witte or memorie, to be apt to learning, and ſuch like: to the bodie, as to be healthful, nimble, ſtrong, and ſuch like.

What is naturall impotencie?

It is a naturall weakenes either of the mynde or body: of the mind, as to be dull of witte: to be forgetful or vnapt to be taught, and ſuch like: of the bodie, as to be ſickelie, to be weake and feeble, and vnapt to ſuffer any thing that an hable body can do or ſuffer.

VVhat is comprehended vnder this ſecond kinde of qualitie?

To this kinde may be referred all the naturall powers and impotencies of the ſoule vegetatiue, ſenſitiue, and intellectiue: alſo all naturall powers or vertues of hearbes and ſtones, and the naturall influences of the heauens, ſtarres, elements, and of all the ſuperiour or vpper bodies. All which thinges you may ſee playneſt ſet forth in this Table following.

- Naturall power is eyther
  - Of the body, as
    - Health,
    - hardines,
    - nimblenes,
    - strength.
  - or of the minde, if it be of ỹ minde, it is either
    - Power vegetatiue is eyther
      - principal as
        - Nutritiue,
        - Augmentatiue
        - Generatiue.
      - or adiuuant, as
        - Attractiue,
        - Immutatiue,
        - Retentiue,
        - Expulsiue.
    - Power sensitiue is eyther
      - Comprehensiue which is eyther
        - Interior, as
          - Common sense,
          - Phantasie,
          - Memorie,
        - exteriour, as
          - Sight,
          - Hearing,
          - Smelling,
          - Tasting,
          - Feeling.
      - or motiue which is eyther
        - Appetitiue which is eyther
          - Concupiscible or irascible, whereof springe all the perturbations & passions of the mind, as loue, hate, wrath.
        - progressiue, as
          - to goe,
          - to flie,
          - to swym.
    - or power intellectiue, which is eyther
      - Speculatiue, as
        - to contemplate,
        - to vnderstand.
      - or practiue, as
        - to will,
        - to nill,
        - to command,
        - to chuse.

- Naturall impotencie is eyther
  - Of the body as
    - to be sicke,
    - to be weake,
    - to be feeble.
  - Or of the minde as
    - to be forgetfull.
    - to be vnapt to be taught.

Of

Of Pasion and pasible qualitie, the third kinde of qualitie.

VVHat doth the third kinde of qualitie comprehend?
Passion and passible qualitie.
VVhat is Pasion?

It is a sodaine motion of the minde or bodie that endureth not long, and therefore easie to be remoued: Passion of the minde is a sodaine feare or ioy conceiued of some euill or good that is offered: and of the bodie, as palenes of colour, blushing or trembling of the flesh.

VVhat is pasible qualitie?

It is an inueterate affection or motion of the minde or bodie not easie to be remoued: of the minde, as madnes growne of some continuall sorrow or melancholie: of the bodie, as blacknes of the face by continuall boyling heate of the bloud, or palenes by continuall sicknes of the bodie: and therefore passible qualitie is compared and likened to habite, and sodaine passion to disposition.

VVhat is comprehended vnder pasible qualitie?

All the obiects of the fiue outward senses, as colours, light, brightnes, which be the obiects of the sight, sounds, voices and noyses, the obiects of hearing: sauours the obiects of tasting: odours & smelles the obiects of smelling: tangible qualities, which be the obiects of feeling: of which tangible qualities some are said to be first, and some second: the first be these, heate, coldnes, moistnes, drynes: the second be hardnes, softnes, heauines, lightnes, roughnes, smoothnes, and such like.

Which be the chiefe pasions or affections of the minde?

The chiefe affections be these fowre, ioy, lust, sorrow, feare.

(or) desire

How is Ioy defined, and what good or euil brãches do spring therof?

Ioy is a sweete and delectable motion of the heart, wherewith it is stirred and delighted, whilst it enioyeth some good that is present, or at the least, seemeth good: and hereof springeth delight, boasting, maleuolence, reioysing at others mens euill.

What is lust, and what affections doe spring thereof?

Lust is a motion of the minde stirred vp by thinking of some good in deede, or seeming good that is absent, whereof doe springe these affecions, hope, desire, loue, anger, wrath and hatred.

VVhat is sorrow, and what affections doe arise thereof?

It is a greeuous motion of the heart causing it to shrinke to-

gether whilst it fleeth some present euill, that is euill indeede or seemeth euill: and hereof springeth these affections, enuy, slaundering, merry, agony, lamenting, calamitie, carefulnes, griefe and desperation.

What is feare, and what affections doe rise thereof?

Feare is a grieuous motion causing the heart to shrinke together whilst it flieth some euil that is to come: and hereof springeth these affections, heauines, shame, terror, sownding and such like: all which thinges you may see briefly set forth in the Table next following.

The Table of Passion and passible qualitie.

Passion is eyther
- Of the mynde, as
  - Ioy.
  - Lust.
  - Sorrow.
  - Feare.
- or of the bodie, as
  - Sodaine palenes,
  - Sodaine blushing
  - or trembling of the flesh.

Passible qualitie containeth
- All the inueterate passions both of minde and body before set down.
- and also all the obiects of the fiue Senses, as
  - Colours,
  - Sounds,
  - Odours,
  - Sauours,
  - Tangible qualities.

  the obiects
  - of the sight,
  - of hearing,
  - of smelling,
  - of tasting,
  - of touching or feeling.

Why are these obiects of the senses called passible qualities?

Because they make the senses to suffer as the colour of any thinge by striking into the Eye maketh the sight to suffer, and causeth either pleasure or griefe to the sight: so likewise the sweetnes

nes of honie in striking the taste delighteth it: and contrariwise the bitternes of gall or such like thing endued with a bitter sauor offendeth the taste.

Of figure and forme, the fourth kinde of qualitie.

WHat difference is betwixt figure and forme?

Figure according to some, is that which is enclosed with one bound or limite, or with manie, as a circle enuyroned with one round lyne called the circumference, or as a triangle or foure-square figure, whereof the one is enclosed with 3. lynes, and th'other with foure, and such like: but Forme is the drawing or describing of the said figure. Againe, according to the opinion of some, figure is compared to an image representing some liuely thing: and forme is said to be the due proportion and feature of the same. Some againe doe attribute figure to thinges without life, and forme to things that haue life, briefly set down in this verse following,

Formam viuentis, picti dic esse figuram: englished thus,

The shapes of painted thinges they figures call,
But liuing thinges they say are formed all.

What doth this fourth kinde of qualitie comprehend?

It comprehendeth the accidentall figures and formes, as well of naturall as artificial thinges: of naturall, as the shape of man, beast, or fowle: or artificiall, as the shape or figure of a house, temple, ship, or such like: also it comprehendeth all Geometricall figures as well perfect as vnperfect.

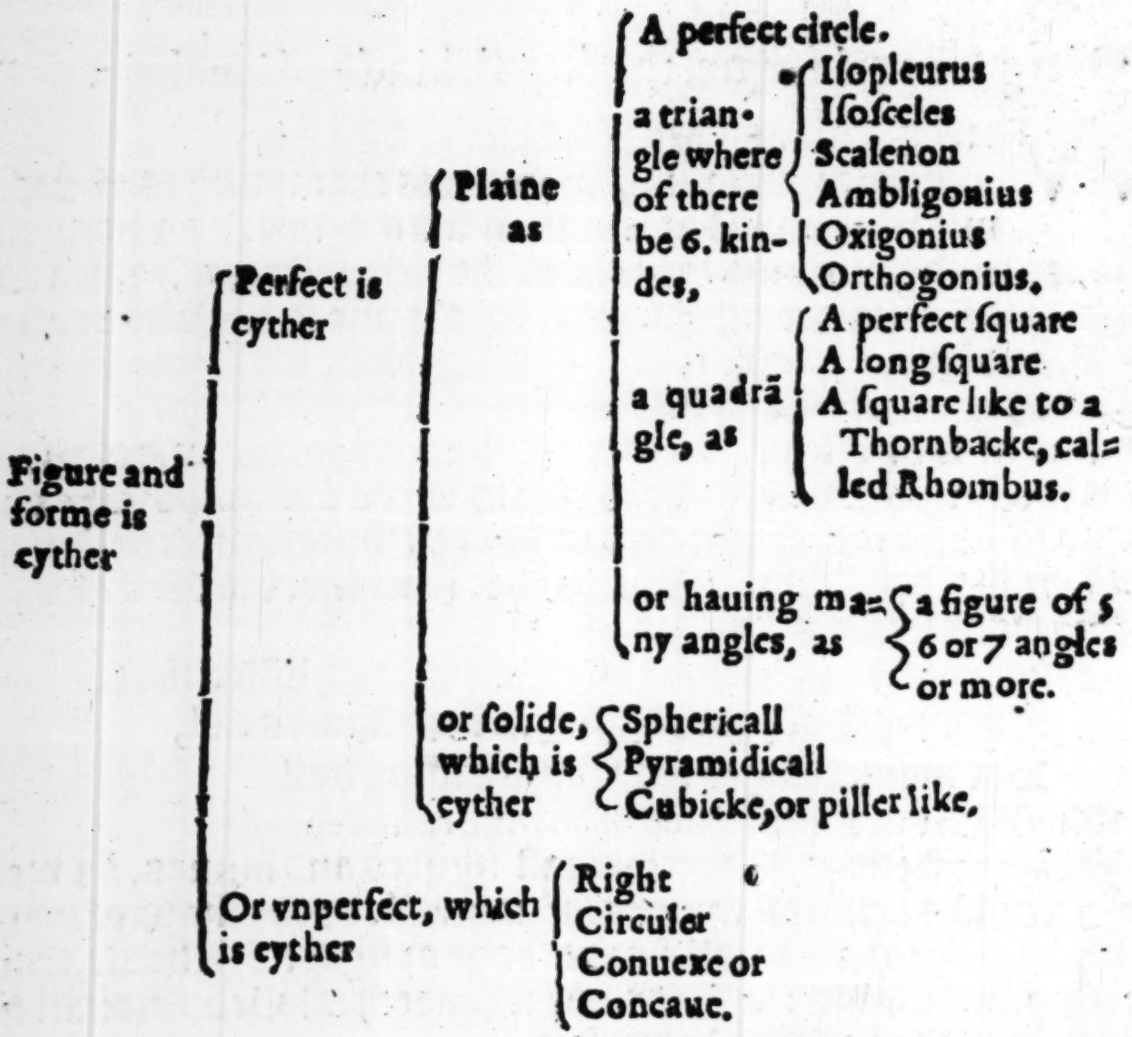
Which call you perfect?

Those that are enclosed within such bounds as nothing can be added or taken away from them, without marring or altering the same, as a circle, a triangle, a square, and such like: whereof some are plaine enclosed only with lines, as circles, triangles, squares, and such like: and some are solid or whole bodies enclosed with vpper faces cyther one or manie, as round spheares, sharpe pynacles, cubes, as a dye, and round pillers.

Which call you vnperfect?

Those which are not so enclosed with their bounds, but that some one thing may be added or taken away from the same without changing or altering of the figure, as the rightnes, roundnes, concauity or conuexity of vnperfect figures may be lengthened or shortned, and yet the former shape thereof shall still remaine, and not be altered, but onelie in quantity.

A Table of figure and forme.



But the true descriptions of all the figures contained in this table are to be learned of the Geometricians, and not of the Logicians.

Of the properties of Qualitie.

HOw manie properties doe belong to Qualitie?

Three. First to be contrarie, as vertue is contrarie to vice, heate to cold, white to blacke: yet such contrarietie belongeth not to euery kynde of Quality, for Triangles be not contrarie to Squares, nor round pillers to sharpe pynacles.

Whae-

What is the ſecond propertie?

To be more or leſſe, for one man may be more vertuous or leſſe vertuous, more learned or leſſe learned, more healthfull, or leſſe healthfull, more or leſſe, hotte or cold, yet this propertie belongeth not to euery kinde of qualitie, for one triangle is no more a triangle then another: the like may be ſaid of the reſt of the perfect Figures, alwell plaine as ſolide.

What is the third propertie?

To be like or vnlike, and this is the chiefeſt propertie belonging to euerie kinde of quality, as two Grammarians be like one to another in their profeſſion, two healthfull or vnhealthfull, two white or two blacke, two triangles or two ſquares are ſaid to be like or vnlike one to another.

How define you likenes or vnlikenes?

Likenelle according to Boetius, is when diuers thinges haue one ſelfe qualitie: vnlikenes is when they haue diuers qualities.

Of Relation. Chapter 11.

WHat is Relation?

It is the referring, comparing or applying of one thing vnto another for ſome reſpect of affinity or likenes wherewithe they are knit ſo together, as the one cannot be well vnderſtood without the other: and therefore the things ſo compared are called Relatiues, or rather correlatiues, for of thinges ſome are ſaid to be abſolute, and ſome reſpective or relatiue.

Which call you abſolute?

Abſolute are thoſe which may bee vnderſtood by themſelues, without being applied to any other thing, as ſubſtance, quantity, qualitie.

Which are ſaid to be relatiue or reſpectiue?

Thoſe that cannot be well vnderſtood of themſelues without hauing relation to ſome other thing, as the father and the ſonne, the Lord and the bondman, the Maſter and the Scholler, &c. Here note that of the ſchoolemen, the thing from which the application is made, is called in latine fundamentum, in Engliſh the foundation, and the thing whereunto the relation or application is made, is called in latine terminus, in Engliſh the bound, end, or tearme, as in theſe Correlatiues, the Father and the Sonne, the

Lorde and the bondman, the Schoolemaster and the Scholler: Here the Father, the Lord, and Schoolemaister, are called euerie of them fundamentum, but the sonne, the bondman and scholler, euerie of them is called terminus, that is, the end or tearme, and the application of the one to the other is called relation.

How many kindes of Relatiues bee there?

Two: Relatiues secundum esse, that is in deed, and Relatiues secundum dici, which we may call relatiues in name.

Which call yee Relatiues in deed?

Those which according to their principall signification haue relation to some other thing, without which they cannot bee vnderstood, as a Father is not to be vnderstood without there bee a Sonne, nor a Sonne vnlesse there be a Father: the like may bee said of a Tutor and pupil, the Maister and his Scholler, and such like.

What call yee Relatiues in name?

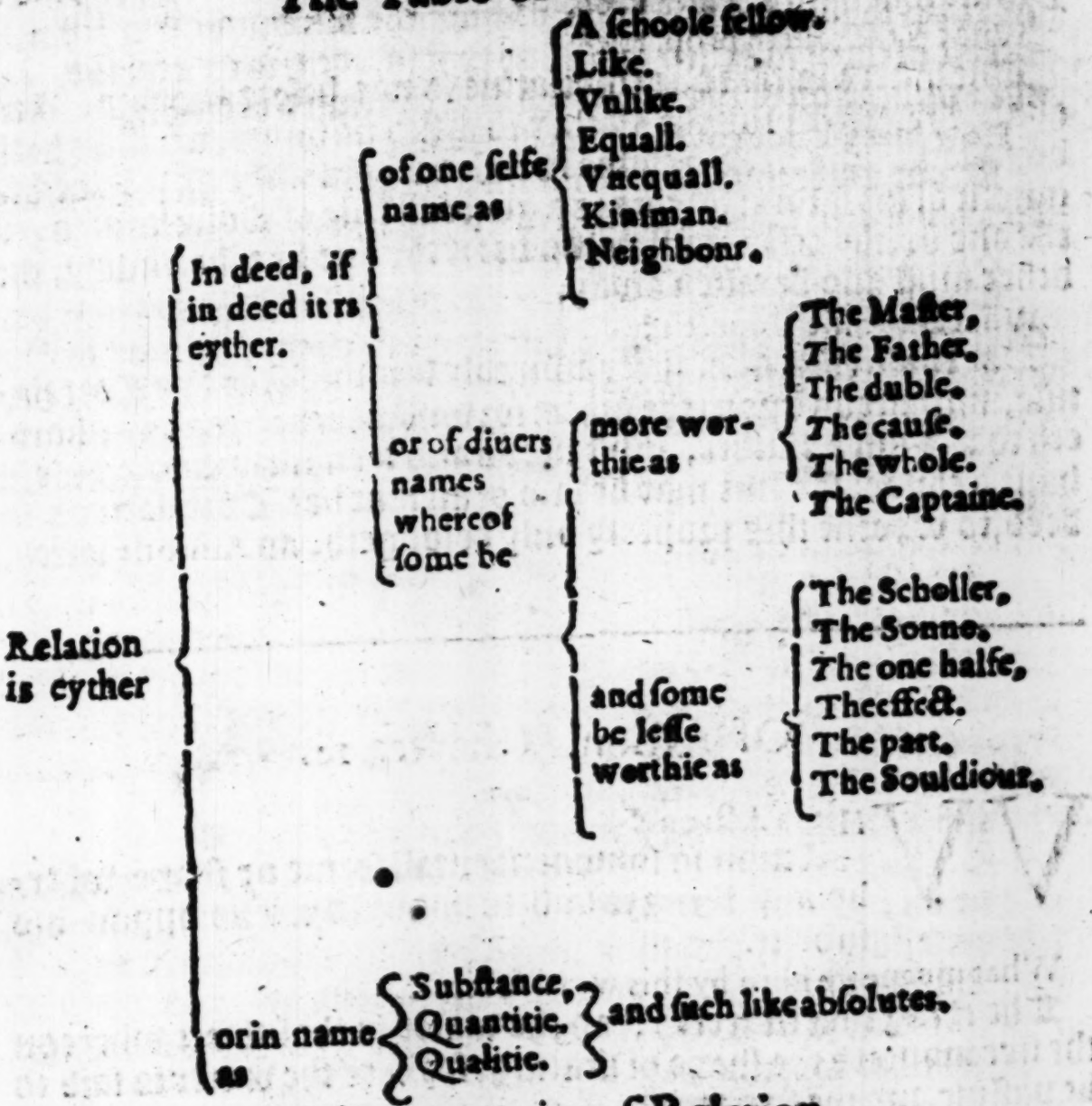
Those that according to their principall signification may be vnderstood, without hauing Relation to any other thing. and yet because in some respect they haue relation to som other thing, they are called Relatiues, but not properly, for they differ not from the absolute thinges before defined: as vertue, vice, habit, disposition, &c.

What other diuision is there of Relatiues?

Of Relatiues some are said to be of one selfe name, and some of diuers, of one selfe name as like, vnlike, equall, vnequall, schoolefellow, neighbour, & such like: of diuers names, as the father the Sonne, the Lorde and bondman, &c. And of such some be more worthy, and some be lesse worthie, as the father is more worthie, the sonne lesse worthie, the Maister more worthy, the Scholler lesse worthy: which diuisions this table doth shew.

THE

The Table of Relation.



Of the properties of Relation.

HOw manie properties doe belong to Relation?

Fiue: First to haue contrariety, as vertue and vice, science and ignorance, but this property belongeth not to all: for duble and the one halfe hath no contrarietie, nor the Father and the Sonne.

What is the second propertie?

The second is to be more or lesse, as to be more like, or lesse like: or more equall or lesse equall: yet this belongeth not to all: for double hath neither more or lesse: nor one Father is saide to be more or lesse then another.

What is the third propertie?

The third is, that al Relatiues (which are Relatiues in deed)

are conuertible: for he is a Father that hath a Sonne, and he is a Sonne that hath a Father, &c.

What is the fourth propertie?

The fourth is that ons correlatiue is not before another, but are both together: as the Father is called no father, vntill he hath begotten a childe, and a childe is called no Sonne before he be begotten of the father: for this is a generall rule of Correlatiues, if the one be, the other must needs be: if the one be taken away, the other must also be taken away.

What is the fift propertie?

The fift is that whosoeuer assuredly knoweth the one Correlatiue, must needs know the other: for whosoeuer certainely knoweth that I am a Father, must needs also certainely know that I haue a childe: the like may be said of all that bee Correlatiues indeed, to whome this property only belongeth, as Aristotle saieth.

Of Action. Chapter 12.

WHat is Action?

Action is some accidentall forme or shape whereby any thing is said to doe or to worke vppon his subiect.

What meane ye here by this word subiect?

The thing that suffereth, as the water is the subiect whereon the fire induceth the shape of heating, for here the water is said to be passiue, and the fire actiue.

How is action deuided?

Into actions of the soule and of the body: The actions of the soule are those which the soule doth, for according to his power vegetatiue, his actions are to nourish, to increase, and to engender, and according to his power sensitiue to see, to heare, to smell to taste, to feele, & according to his power intellectiue, to vnderstand, to will, to nill, and such like.

The actions of the body are those that doe immediatly belong to some body or corporall accident, as to cut, to strike, to heate, to coole, to moisten, to dry, to make white, to make blacke, and such like.

Is there no other deuision of action?

Yes diuers, but such as doe rather belong to naturall Philosophers and to Diuines then to Logitians, and therefore we leaue

leane to speake any further of them.

What doth this predicament comprehend?

All Nounes and Verbes of the Actiue signification, as these Nounes, Generation, Corruption, Augmentation, Diminution, Alteration, mouing from place to place and such like: also all Verbes actiue, as to engender, to corrupt, to increase, to diminish, to alter or change, and to moue from place to place, and such like Verbes of the Actiue signification.

How manie properties doe belong to action?

Two: first to admit contrariety not simply but per accidens, as to kindle and to extinguish: Secondly to be more or lesse, & yet accidentally, as one fire to burne more, and another lesse, one water to coole more, and another lesse.

Of Passion. Chapter 13

WHat is Passion?

It is the relation or application of the patient to the agent: as for example, whilst the water suffereth to be heated by the fire, this sufferance is called passion.

What doth this Predicament comprehend?

All Verbes of the passiue signification, as to bee engendred, corrupted, encreased, diminished, or altered, and such like.

What properties doe belong to Passion?

The same that haue bin said before to belong vnto action.

Of the Predicament where, called in latine *vbi*. Chapter 14.

HOw define you the Predicament vbi?

Vbi is to be in some place, as when a bodie is inclosed within a place, and therefore is defined of some to bee the description of the place wherein any thing is saide to bee, or to be done or made, as in the heauens, in the earth, in the temple, in the house, and such like.

How is this Predicament deuided?

Into vbi simplex, and vbi compositum, that is to say, simple and compound.

When is it ſaid to be ſimple?

When a thing indiuiſible is in ſome indiuiſible place: as an Angell in Puncto, or when a thing indiuiſible is in a place diuiſible, as an Angell in the Temple, for the Temple may be diuided into many parts though the Angell cannot.

When is it ſaid to be compound?

When ſome diuiſible body is contained in a place diuiſible, as the being of thinges corporall in the water, or in the ayre: for corporall things bee ſo diuiſibly placed in their places, as euery parte of the thing placed is aunſwerable to euerie parte of the place wherein they are contained, and ſo contrarily, as to the parts of a mans body enuironed with the ayre, one part of that ayre is anſwerable to the heade, another to the feete, and ſo conſequently of all the reſt, and therefore the Schoolemen ſay, that Vbi compoſitum is to be in a place circumſcriptiuely, but Vbi ſimplex is to be in a place definitiuely (that is to ſay) in ſome certaine place, though not according to the poſition or order of placing the parts, but when a thing is ſaide to be in a place circumſcriptiuely, then ſuch place and thing may be both deuided according to the parts of poſition or placing, as this part here, and the other part there, whereof ſpringeth theſe differences, aboue, beneath, before, behind, on the right ſide, on the left ſide, and ſuch like. And finally this predicament comprehendeth whatſoeuer anſwereth to this queſtion, where any thing is ſaid to be or to be done.

What properties doo belong to the predicament where?

Three: Firſt to admit no contrariety, for though to be aboue and beneath ſeeme to be contrary, yet that is to be vnderſtoode Phiſically and not Dialectically: Secondly it admitteth neither more nor leſſe, for to be in the Temple is no more to be in place then to be in the market or in any houſe: but the third and chiefeſt property of Vbi is to containe.

Of the predicament When, called in Latine *Quando*. Chapter 15.

How define you this predicament?

This is ſaide to be a relation or application of a thing meaſured by time, vnto time it ſelfe, and containeth the differences of times, whereby any thing is ſaide to bee, to haue beene, or ſhall be, to doo, or to ſuffer: and to ſpeake briefly, it

comprehendeth all wordes that answere to this question when, as yesterday, to morrow, the next day, and such like.

How is Quando deuided?

Two manner of waies, for sometime it is said to bee definite, that is, certaineas in this or that hower, day, or yeare, which is certaine: and sometime indefinite, that is, vncertaine, as to haue beene, without any limitation of time, which is vncertaine: Secondly Quando may bee deuided into his partes of succession, as into time past, present, and to come.

What properties doo belong to this predicament?

First to haue no contrariety: Secondly to admit neither more or lesse: Thirdly to be alwaies flitting or fluxible, and neuer permanent, which property it hath by reason of time which continually passeth away.

Of the predicament to be situated, called in Latine *Situm esse*. Chapter 16.

WHat is Situm esse?

Quintilian sayth, that Situm esse is asmuch to say, as to be situated, ordered or placed some manner of way, and it is a generall word comprehending all names that doo expresse the site or ordering of the body & parts thereof, as to stand, to sit, to lye either groueling or right vp, or on the one side: And finally it comprehendeth all those wordes which answere to this question, howe any thing is situated, as when it is required how Norwich standeth from London, either Northward, Southward, westward or Eastward.

How is site deuided of the Schoolemen?

Into site naturall and casuall.

Which call you naturall site?

That whereby euery part of the body hath his naturall place, as in mans body the head to stand aboue, the belly in the midst and the feete beneath, and so in a tree the roote to be lowest, the body in the midst, and the boughes or branches to be highest.

What call you site casuall?

That whereby the position or ordering of the parts is altered any way by accident, as nowe to stande vpright, nowe to stoupe as to sit, or to lye downe, this way, or that way.

What

What descriptions are to be fetched from this predicament?

The descriptions of places.

What properties doe belong to this predicament?

Two: First to admit no contrariety, for though vpward seemeth to be contrarie to downeward, yet that is vnderstood Physically and not dialectically: Secondly it hath neyther more nor lesse, for to stand is no more a sight then to sit, nor siting more the standing.

Which things doe alter their situation, and which not?

All thinges without life and feeling doe keepe their site, if by violence they be not changed: but al thinges hauing life and feeling do alter their site, when and as often as it pleaseth them, as a beast to rise vp, or to lie downe, and so forth.

The Table of site.

Site is either,
- naturall as
  - the head to stand aboue,
  - the bellie to be in the midst,
  - and the feete beneath.
- or casual as
  - going,
  - standing,
  - lying groueling, or
  - with the face vpward.

Of the predicament to haue, called in latine *habere*. Chapter 17.

WHat doth this word to haue signifie?

It hath 3. special significations: First to be clad with garments, armour or ornament: Secondly to possesse any thing, as to possesse wife, lands, or goods: Thirdly to containe any thing, as a vessell to containe either liquid or drie matter that is powred therein, and therefore this predicament comprehendeth all such modes as are derived of the names of garments, as to bee gowned, cloaked, or coated: Also of Armour al men defensiue as offensiue: Defensiue as to bee Armed with a Corslet, Jacke,

Jacke, or shirt of male, and such like. Offensiue, as be armed with a sword, dagger, caliuer, halbert or pike: also beasts and fishes are said to be armed with nailes, horns, tallons, beaks, scales, fynnes & such like: also it comprehendeth words of ornamẽt, as to be decked with chaines, Jewels and Tablets: also words of possession, as to haue lands or goods: also words of containing, as to bee full of wine, oyle or hony, as you may see in the table following.

The table of the predicament to Haue.

To Haue is three fold, that is
- to be clad
  - with garments, as to be gowned or cloked.
  - with armour, as with a Corselet or Halbert.
  - or with ornaments, as with tablet or chayne.
- to possesse, as to posiesse lands or goods.
- to containe, as a vessell to be full of liquor. &c.

What properties doe belong to this predicament?

Two: first to admit more and lesse: for a man at armes is sayd to be more armed, then a light Horseman: and a Pikeman more then a Caliuer or Harquebuzier. Again he that is clad with two coates is more clad then he that weareth but one: Secondly, this predicament admitteth in some sort contrarietie: for to be armed and vnarmed, clad and naked are contraries by priuation, but not otherwise.

Of the vse of the Predicaments. Chap. 18.

TO what vse or end doe these Predicaments serue?

To many good vses: First if you will define any thing you shal be sure in some of these predicaments to finde out the generall kynde thereof, together with al the differences for the most part belonging to the same: which if they be not set downe, then they are to be gathered out of the proper accidents incident to the thing which you would define. Secondly, if you would diuide any thing, heere you shall finde both the generall kyndes, speciall kyndes, yea and diuers examples of the Indiuiduums comprehended vnder the same kyndes. Thirdly, out of these predicaments you may gather matter apt to proue any question, eyther generall or particular.

Of post-predicaments. Chap. 19.

WHat meane you by Post-predicaments?

They be Interpretations of certaine words more plainely expounded after the Predicaments, for the better vnderstanding of certain of ỹ said predicamẽts.

Which are they?

These fiue: Oppositio, prius & posterius, simul, motus & habere, that is to say in English, Opposition, before and after, together, moouing, and to haue: euery one whereof may be taken and interpreted diuers wayes.

What is Opposition?

Opposition is the repugnancy or contrariety of 2. extreames, which are contrarie one to another, in such sort as none of them is in like manner repugnant to any other thing: as for example, white and blacke being two extreames are more contrary one to another then eyther of them is to any other colour, as to redde, yealow, russet or blew.

Sith some things are said to be agreable one to another, and some contrarie one to another, and some diuers one from another: it were not amisse first heere to tell how, and when thinges are said to be agreable, diuerse or repugnant one to another.

Thinges are said to be agreable one to another 3. manner of wayes: First when they agree in generall kynde, as those which are subiect to one next generall kynde, as man and horse doe agree in generall kynde, bicause this word animal or sensible body is the next generall kynde to them both. Secondly thinges are said to agree in speciall kinde, as Edward and John are both comprehended vnder this word (man). Thirdly things are sayd to agree in number, as words hauing one selfe signification, called in Greeke synonyma, as a blade, a rapier, a curtilas or stucke signifying a sword: also things of like substance or definition, as man, and a sensible bodie indued with reason: and by these three wayes thinges are said also to differ one from another, for they may differ one from another in generall kynd, in speciall kynd, & in number: in generall kynde, as a sensible body, and a tree: in speciall kynde, as a horse and an asse: againe they may differ in number, as the Individuums that be comprehended vnder one special kynde, as John and Edward doe differ onely in number.

Is it all one to be diuers and contrarie?

No: for those thinges are said to be diuers which differ any of the

the wayes aboueſayde, or by any other difference, be it common, proper, or moſt proper: yet few or none of theſe thinges are contrarie one to another, for no ſubſtance admitteth contrariety, nor yet many accidents, vnleſſe it be by reaſon of quality, wherevnto contrarietie doth properly belong.

How mãy waies are things ſaid to be contrary one to another?

Fower manner of waies, that is, relatiue, contrarie, priuatiue and contradictory, that is to ſay, by relation, by contrariety, by priuation, and by contradiction.

Which things are ſaid to be oppoſite or contrarie by relation?

Thoſe things are oppoſite by relation, which according to their owne ſignifications haue mutuall relation one to another, neyther can they be both verified of one ſelfe thing in one ſelfe reſpect, as the father and the ſon, the lord and the bondman, for one man can not be both a father and a ſon in one reſpect, but in diuers reſpects he may: for euery man that hath a ſon is notwithſtanding a ſon to his owne father, and a father to his owne ſon.

Which things are ſaid to be oppoſite by contrariety?

Thoſe thinges are ſaid to be contrary, which being comprehended vnder one ſelfe kinde doe moſt differ one from another, & yet both may be one after another in one ſelfe ſubiect meete to receaue the ſame, becauſe the one gineth place to th'other, vnleſſe it be ſuch a thing as is naturally incident to the ſaid ſubiect: as heat and cold being contayned vnder quality, are moſt contrary one to another, and yet may be one after another in mans body, or anie other ſubiect apt to receiue the ſame, for many times heat driueth out cold, and cold heat: yet in fire it is not ſo, for heate is alwaies naturally incident to fire, and will neuer giue place to cold, ſo long as it is fire and not extinct.

How are contraries diuided?

Of contraries ſome haue a mean called of the ſchoolemen contraria mediata, and ſome haue no mean called contraria immediata.

When are they ſaid to haue a meane?

When the two contraries are ſuch, as neither of them is of meere neceſſity, in any ſubiect meete to receaue the ſame, as white and blacke: for that ſubiect which is apt to receaue them both, may be yealow or ruſſet, and ſo the ſubiect is neyther white nor blacke.

When are they ſaid to haue no meane?

When the one of the two contraries may be alwaies truly affirmed of any ſubiect apt to receaue the ſame, as ſickes & health: for man or beaſt is truly ſaid to be eyther ſicke or whole: alſo vice and vertue haue no meane, for a man is ſaid to be either good or

euill, yet some make good and euil to haue a meane called a thing indifferent: likewise hote and cold to haue a meane, that is to say, luke warme: and betwixt health and sicknes Galen maketh a meane estate, ỹ is to say, neither whole nor sicke, but betwixt both.

Which are opposites by priuation?

Opposites by priuation are two contraries belonging to one self subiect apt to receiue the same, in the which subiect, when the one is wanting at such tyme as nature doth appoynt, the other must needes be, as sight and blindnes in the eye, hearing & deafnes in the eare, light and darknes in the skye, or in any other thing meete to receiue both. (appoint)

Wherefore doe you adde this clause, at such time as nature doth

Because it is not needfull that one of these oppolites be in the subiect in all times: as for example, the whelpe which is not nyne dayes old, though as yet he seeth not, yet is he not said to be blind, because Nature hath appointed him no sooner to see.

Which be opposite by contradiction?

They be two contraries, hauing no meane, and doe consist in contradiction, that is to say, in denying the one th'other, and such contradiction consisteth eyther in propositions, or els in simple or single termes.

Giue examples of both.

In Propositions thus, Iohn is honest, Iohn is not honest: Plato disputeth, plato disputeth not, in which kind of propositiõs there is no meane of truth or falshode: for of necessity the one of them must alwaies be eyther true or false in such sort, as both can not be true together, nor both false together: In simple termes thus, a man, no mã: to know, not to know: to be, & not to be: and therefore oppolites by contradiction be most contrary, and doe differ from all the rest, for in all the other oppolites it is easie to finde out some meane subiect, whereof neyther of them can bee trulie spoken or affirmed.

Of Before and After, called in latine Prius & Posterius. Chap. 20.

HOw many waies is a thing said to be before and after?

Fiue manner of waies, that is, by time, nature, order, honor and cause, contained in these 2. latine verses.

Tempore, natura, prius ordine, dic & honore:
Et causſa effectis dicitur esse prior.

Giue examples of euery one.

First by time, Cicero is said to be before Quintilian, and Socrates before Aristotle, and such like: Secondlie by nature, that thing is said to be first or before, from which the Consequent cannot returne backward: by which way all generall kynds are said

to be before their speciall kyndes, and speciall kyndes before their Individuums: for if man be, then sensible body (which is the generall kynd) must needs be, but not contrarily: so likewise if John be, man must needs bee, but not contrarily, for it followeth not of necessity, Because it is a sensible body, Ergo it is a man, or because it is a man, Ergo it is John. Thirdly by order one thing is said to be before another, as 1. before 2. and 2. before 3: letters before syllables, and syllables before words, and words before speeche: To this also appertaynеth that which is said to be before by situation, as in going from Norwich to London, Thetford is before Newmarket, and Newmarket before ware, and so forth. Fourthly by honor or dignity: An Emperor is said to be before a King, a King before a Duke, a Duke before an Earle, an Earle before a Baron .&c. Fiftly the cause is said to be before his effect, as the riſing of the Sun is said to be before day, so the difference is said to be before his speciall kynd, and the speciall kynd before his property: And these be conuertible, for if it be day, the Sun must needs be vp: and if the speciall difference be, the speciall kynde must needs be, and so contrarily.

To what end serueth this manifold way of Before and After?

To th'entent that we may the better vnderstand what hath bene said before touching oppolites by relation, that is to say, that Relatiues are alwaies together by order of nature, and not one before another, but only by their fourth way, that is to say, by honor or worthines, which way, as Aristotle sayeth, of all the other wayes is most vnproper and least to the purpose.

Of the word Together called in latine Simul. Chap. 21.

HOw many waies are things said to be Together?

Two waies: that is, by order of time, and by order of nature: First by order of time the heate and shining of the Sunne are said to be in the Sunne together, that is, at one time: also the angels were created altogether, and at one time Secondly those things are said to be together by order of nature, which haue natural relation one to another, & be conuertible, neither is the one cause of the other, as the father & the sonne, single and double, and such like: and many do add hereunto diuers special kinds & differences subiect to one self generall kinde, as man and brute beast, reasonable and vnreasonable are subiect to the generall kynd sensible body or animal.

Of Mouing or Motion, called in latine Motus, and of the kindes thereof. Chap. 22.

WHerefore is mention made heere of Mouing?

For the better vnderstanding of the Predicament Action, whereunto Mouing belongeth.

How manie kindes of motion or mouing be there?

Six, briefly touched before in the predicament of Action, that is to say, Generation, Corruption, Augmentation, Diminution, Alteration and Mouing from place to place.

Define these kindes.

1. Generation is a proceeding from the not being of a substance
2. to the being of the same, as from an acorne to an Oke. 2. Cor-
ruption contrariwise is a proceeding from a being to a not
3. being, as from an Oke to chippes or ashes. 3. Augmentati-
tion is the encreasing of a greater quantity in the whole: as
4. from a child to a man. 4. Diminution is contrariwise a de-
creasing or diminishing of quãtity in the whole, as a body that
5. consumeth or pyneth by disease or otherwise. 5. Alteration
is a proceeding or changing from one quality into another, as
6. from hote to cold. 6. Mouing from place to place is, as the
mouing of the Sun out of the East into the west.

Of the word Habere, that is, to haue, and how manie waies it is to be vnderstoode. Chap. 23.

How manie significations hath this word to Haue?

1. Eight: First, to haue a quality, as science, vice or ver-
2. tue. 2. to haue a quantity, as to be vj. vij. or viij. foote
3. long. 3. to be clad, as to haue a cloke or coate. 4. to
4. haue some part of the body clad or decked with some thing, as
5. the finger with a Ring, the necke with a chayne. 5. to haue a
6. part or member, as a hand, a head or foote. 6. to containe, as
7. a hogshead that hath therin beere or wine. 7. to possesse, as to
8. haue lands, tenemẽts or goods. 8. to haue a wife: which accor-
ding to Aristotle is vnproperly said, because nothing can be
properly said to haue which is had it selfe of the same, for the
wife hath the man aswell as the man the wife: and therefore
this way of hauing serueth to little purpose.

Here endeth the first Booke of Logike.

THE

THE SECOND BOOKE OF LOGIKE.

Of Definition. Chap. I.

HAuing hitherto ſufficientlie ſpoken of the Predicables and Predicaments, and of all things belonging vnto them, without the knowledge whereof, no true Definition nor good Diuiſion can be well made: me thinks it were meete now to treate of Definition and Diuiſion.

What is Definition, and how manifold is it?

Definition is a ſpeech whereby eyther ſome name or thing is declared: and it is twofold, that is, of a name and of a thing.

What is definition of a name, and how manifold is it?

Definition of a name is a ſpeech whereby the ſignification of
1. **ſome word is declared: and it is ten-folde. 1. Definition ver-**
bal, as when a word leſſe knowne is declared by a word more
knowne, as thus, to imitate, is as much to ſay as to follow or
2. **to counterfaite: againe, to accompliſh is to fulfill. 2. Defini-**
tion by difference, as he is a king which ruleth by law: but he
3. **that ruleth by force is a tyrant. 3. Definition metaphorical or**
by figure, as Adoleſcency is the flower of mans age: good preа-
4. **chers are the ſalt of the earth. 4. Definition by contrary, as**
5. **vertue is to flee vice. 5. Definition by circumlocution, as the**
6. **writer of the Trojan warre, that is to ſay, Homer. 6. Defi-**
nition

tion by example, as to say, that this word reasonable or vnrea-
7. sonable is a speciall difference. 7. Definition by want or de-
fect, as that is 3. quarters which lacketh a quarter of a yard
8. or any such like thing. 8. Definition by praise or dispraise: by
praise, as Logike is an Arte of Artes and Science of Sci-
ences: Iustice is the Queene of all vertues: By dispraise, as
9. Idlenes is the corruption or destruction of youth. 9. Defini-
tion by similitude, as the Sunne is the eye of the world: a Ci-
tie without a Magistrate is as a shippe without a Gouernor.
10. Definition by Etymology, as he is rightly called goodman,
because he is a good man in deede and full of good works.

When is definition of the name needfull to be vsed?

When some doubtfull word is cause of the controuersy.

Of the definition of a thing.

WHat is the definition of a thing?

It is a speech which declareth briefly, playnely and aptly the very Nature and substance of the thing which is defined.

How is the definition of a thing diuided?

Into these six kyndes, that is to say, into definition essentiall, causall, by the Relatiue, by the effects and offices, by numbering vp of the parts, and by heaping vp of accidents.

What is definition essentiall?

It is that which consisteth of the next generall kynde ioyned with some speciall difference or property belonging to the same kynde: as when I define a man to be a sensible body endued with reason, or apt to speake: and this is the Logicall definition most sure of all others, but not easy to be made of euery thing, for lacke of speciall differences and naturall properties.

When is it said to be a causall definition?

When it is made of the generall kynde and of the proper causes of the thing defined.

How manie chiefe kyndes of causes be there?

Foure, that is, matter, forme, cause efficient, and end.

How define you Matter?

Matter is that wherof any thing is made, as cloth is ỹ matter wherof a cleke or coate is made, & woll is the matter of cloth.

What is Forme?

Forme is the shape whereof any thing taketh both his being and his name: and therefore the Schoolemen doe define forme to be that which giueth a being to any thing, be it naturall or artifi-

ciall

ciall, as in the examples before recyted, the coate or cloake hath both his being and name of the shape which it hath, and not of the matter.

What is the Cause efficient?

That which maketh or worketh any thing, and is the author thereof, as the Carpenter is Cause efficient of the house, and the Shipwright of the shippe.

What is the End or finall cause?

It is that for whose sake any thing is done, as the end of warre is to haue peace, the end of studie is to get learning and knowledge.

Giue examples of definitions made of euery one of these causes.

Of Matter let this be your example: Beere is a drinke made of maulte, water and hoppes: Of Forme thus, man is a sensible body indued with a soule intellectiue or reasonable, which is the true shape of man: Of the cause efficient thus, that is a decree of the Senate which the senate commandeth and ordaineth, for the Senate is the cause efficient of the decree: Anger or wrath is the boyling of the blond about the hart through the stirring vp of choler: Of the end thus, A house is a building made to defend our bodies from the iniuries of the ayre and weather.

May not a good definition be made of many of these causes ioyned together?

Yes indeede.

Giue example.

Loe here the example of Demosthenes in defining what law is, Law (saith he) is the inuention and gift of God, and the decree of wise men, the correction of crymes eyther rashlie or aduisedlie committed, and a common couenant or consent of the Cittie, according to the which all men ought to liue. In this definition the first and chiefest cause efficient is God, the second cause efficient is the common couenant or consent of the cittie, the matter is the decree of the wise, the end is the correction of crymes and the keeping of the Cittizens in good order of life.

When is a definition said to be made by the Relatiue?

When one Relatiue is interpreted by another, as thus, he is a father which hath a sonne, and he is a master which hath a seruāt.

When is a definition said to be made by the effects, vertues, or offices of the thing defined?

When the nature of the thing is plainlie declared by shewing the said effects or offices, as thus: an Adamant stone is that which being laide nigh to Iron or steele, draweth the steele vnto him:

Iustice is a vertue which giueth euery man his right.

When is a definition said to be made by numbering vp of the parts?

When it containeth eyther the chiefe or all the parts of some whole thing, or els all the speciall kyndes of some generall kynd.

Giue examples of both these wayes.

Of the first thus, a house is a building hauing a foundation, walls and couering: of the second way thus, a sensible bodie is that which comprehendeth both man and mute beast.

When is a definition said to be made by heaping vp of accidents?

When a thing is rather described then defined by such comm̃ and proper accidents as doe belong to the same, as fire is an element that is hote and drie, and exceedeth all other Elements in lightnes: and therefore this last kynde of definition ought rather to be called a description then a definition, which is vsuall to the Poets, Orators and Historiographers, in describing eyther person, fact or thing: also to the Physitians, in describing their simples, as rootes, plants, herbs, and such like.

Of the precepts to be obserued in Definition. Chap. 2.

HOw manie precepts are to be obserued in making a true definition?

These three: first that it briefly expresse the whole power and nature of the thing defined: Secondly that there be nothing therein superfluous, nor any thing wanting: Thirdlie, that the definition be not common to many things, but proper to that thing onely which is defined, so as ỹ it may make it to differ from all other things.

What order is to be obserued in making a dialecticall definition?

First you must know in what Predicament the thing is contained which you would define, to the intent that in descending from the most generall kinde downe towardes the most speciall kinde of the same Predicament, yee may find out by the way that which is next generall kynde to the thing that is to be defined: which next generall kind being found out, ye must then seeke out the special difference or propertie, ỹ proper cause, effect, or comm̃ accidentes belonging to the same: as for example, if yee would define what vertue is, yee must resort to the Predicament of Quality, wherein vertue is contained: then in descending from Quality proceede to Habite, from Habite to habite of the mind, which is twofold, that is to say, intellectual and morall, and not finding

it

it vnder habite intellectual proceed to habite morall, for that is the next generall kinde to vertue: that done, seeke out the difference or propertie, true cause or effect: the difference is to be good, wherin it differeth from vice, for vice is also a morall habite alwell as vertue: the effect of vertue is to incline mans will to doe alwaies according to right reason or true iudgement, so shall you make a true definition of vertue, in saying that vertue is a good morall habite inclyning mans will to doe alwayes according to true iudgement: and after this sort ye may learne to define any other thing.

Of Diuision. Chap. 3.

What is Diuision?

Diuision is the parting or dividing of a word or thing that is more generall vnto other wordes or things lesse generall: for Diuision is twofold, that is, of a name, and of a thing.

When is it said to be the diuision of a name?

When some Equiuoke or doubtfull word is diuided into his manifold significations, as this word Wolfe into a man hauing that name, into a fowre footed beast, into an vlcerous sore, and into a certain fish, each one called by the name of wolfe: which kind of distinction or diuision is very necessary to auoyd ambiguity of speech, which ambiguity causeth many times great error.

How manifold is the diuision of a thing?

It is threefold, that is, substantiall, partible and accidentall.

When is it properly said to be substantiall?

When any generall kynd is diuided by his speciall differences into his proper speciall kynds, as thus, of sensible bodies one is reasonable, as man, & another is vnreasonable, as a brute beast.

When is this kinde of diuision to be vsed?

When the special kinds lacke proper names, as most commonly the speciall kynds subalternate doe, which may be diuided againe as generall kyndes into more speciall kindes: as for example, of vnreasonable beasts some be terrestriall, some be aquaticall, and some ayerie: againe eyerie one of these may be diuided into their speciall kindes, euen vntill yee come to the lowest of all, and vnto the Individuums comprehended vnder the same: and that not only of things contained in the predicament of substance, but also in any other predicaments of accidents, as of magnitudes one is long, as a lyne, another is broad, as a superficies, and another

is thicke, as a body: this diuision though it be of accidents contained in the predicament of Quantity, yet it is called a substantiall diuision, because the generall kinde heere is diuided by his speciall difference into his proper speciall kyndes.

What call you a partible diuision?

I call that a partible diuision which diuideth some whole thing into his parts, which is called of the Latines partitio, as if yee would diuide the Romane common wealth into Senators, Knights and Commons: you may also diuide a house into his principall parts, as into the foundation, walls and rooffe thereof: but the better to vnderstand this kynde of Diuision, it shall not be amisse to shew you heere what kyndes of whole & what kynds of parts there be: for there is whole substantiall & whole integrall: againe of parts, some are called substantiall and some integrall, and of parts integrall some are called similer or like, and some dissimiler or vnlike: Againe of the dissimiler some are called principall, and some not principall: of all which thinges I mynde heere briefly to speake.

First I pray you tell what you meane by whole substantiall, and whole integrall.

Whole substantiall is that which consisteth of substantial parts cleauing wholly together, and not seuerally distinct in number, as whole man consisting of soule and body: but whole integrall is that which consisteth of integrall parts, which though they cleaue together, yet they are distinct and seuerall in number, as mans body consisting of head, breast, belly, legges, &c.

How define you substantiall parts?

Substantiall parts are the first and chiefe parts whereof anie thing is compounded, of which parts if any be wanting, the whole must needes perish, and loseth his name, as the matter and forme of any compound thing, be it naturall or artificiall, as the body and soule are the first and chiefe parts of man: the mettall and fashion of a siluer cuppe are the first and chiefe parts of the cuppe, whereof neyther can be wanting, for the soule without the body is a spirite and not man, and the body without the soule is but a dead carcasse: againe the cuppe without matter or shape is no cuppe at all.

Which be called integrall parts?

Certaine secondary parts, which being all gathered together doe make the whole perfect, as the head, breast, belly, armes, handes, thighes, legges and feete are the integrall parts of mans body: and of these integrall parts, some are called similer, and some dissimiler (that is to say) like and vnlike.

Which are similer and which dissimiler? Similer

Similer or like are these that be of one kynd and of one selfe name, and being diuided into parts, euery such part, be it neuer so small, beareth also the name of the whole, as flesh, bone, sinew, Skin, and such like: for euery little part of the flesh is called flesh, and euerie part of Bone is called Bone: and so of all the rest: hitherto also may be referred water, Fire, Gold, Iron, or any other simple mettall, wyne, wood, stone, and such like, for euery droppe of water is called water, and so of the rest.

Which call you disimiler or vnlike?

Those parts that differ both in kinde and name, as the head, breast, belly, armes, and legges are the parts dissimiler of a mans body: likewise a house, a shippe, and many other thinges haue also such parts, of any one of which parts the whole cannot bee spoken: for you can not say, because heere is the head of a man, Ergo heere is a man. Againe of these dissimiler parts, some are called principal, wherof if any be wanting, the whole must needs perish: as without the head, belly, heart, lyuer or guttes, mans body cannot be. The not principall are those parts without the which the body may be: for though those parts be wanting, yet the body is counted a whole thing, though not perfect in euerie point, as without armes, handes, legges, or feete the body may liue: that building also that hath a foundation, walls and roofe, is counted to be a whole house, though it hath neither doores nor windowes, yet not perfect in euery respect.

Wherein doth partition and diuision differ?

In diuers points, for in diuision any generall kynd may bee rightly spoken of euery speciall kynde contained vnder the same: as this word (sensible body,) which is spoken both of man and beast, but in partition the whole cannot be spoken of euery part: for you cannot say that the soule or body of mā, is whole mā, nor ẏ ẏ head or foot is his whole body: again diuision deuideth vniuersal things into their particulers, & partition diuideth particulers into their parts, and most commonly followeth diuision helping to make subdiuisions: as for example, when diuision hath diuided a sensible body into man and beast, then followeth partition and diuideth man into soule and body, and the body into his integrall parts, as head, breast, belly, legges, and such like.

How manifold is diuision accidentall?

Threefold, for by that we eyther diuide some subiect into his accidents, or some accident into his subiect, or some accident into his accidents.

Giue examples of all these three wayes.

Of the first let this be your example: of men some be free, and some be bond, some be vertuous and some be vicious: and after

this sort you may diuide the Predicament of Substance into as many accidents as you will, running throughout all the 9. Predicaments of Accidents. Of the second way thus: of goods some are said to be of the mind, some of the bodie, and some of Fortune. Of the thirde thus: of good thinges some are said to be honest, some profitable, and some pleasant or delectable: which kynde of diuision is much vsed of the Orators: to this also may be referred the common order of diuiding any speech or Oration into his parts, which the Orators call Partition or Distribution, whereby is set downe in what order euerie thing shall be vttered and declared, which first and which last, and so forth.

Of the precepts to be obserued in Diuision. Chap. 4.

HOw manie precepts are to bee obserued in making a true Diuision?

Three: First that the generall kynd be diuided into his next speciall kyndes, by such speciall differences as are meerely repugnant one to another, and doe comprehend the whole nature of the thing diuided: as thus, of sensible bodyes some be reasonable and some be vnreasonable, for it were no good diuision to say, of sensible bodies one is reasonable and another is twofooted.

What is the second precept?

That the parts being ioyned together may be equall to the whole, and may comprehend neither more nor lesse then ỹ thing which is diuided, as reasonable soule and carnall body being the chiefe parts of man doe comprehend neyther more nor lesse then whole man.

What is the third precept?

That no part or speciall kynd be vsed as a generall kynd, nor the generall kynd as a part or speciall kynd: as in this diuision which Cicero reprooueth, I will shew that through the concupiscence, boldnes, and couetousnes of our aduersaries all mischiefes haue chanced to the common wealth: heere couetousnes is mingled with concupiscence, whereof it is a part: for concupiscence is the generall kynd of all lustes or desires: but this precept seemeth rather to appertaine to a Rhetorical partition then a Dialecticall diuision.

To what end serueth Diuision?

To diuerse good ends, first (as Cicero sayeth) it helpeth greatly to teach playnely to define, and to make thinges that be compound intricate or confused, to appeare simple, playne and certayne

certaine: ſecondly by diuiding thinges orderly into their partes it greatly helpeth memorie: And thirdly it helpeth to amplify any kynde of ſpeech, and to make it more copious.

Of Methode. Chap. 5.

HAuing hitherto ſufficiently ſpoken of words, both ſingular and vniuerſall, and alſo of Definition and Diuiſion, which are the 2. chiefe inſtruments whereby all ſimple queſtions are diſcuſſed, I minde heere to ſhew with what order or methode euerie ſuch queſtion is to be handled.

What is Methode?

Methode is a compendious way of learning or teaching any thing: and it is threefold, that is to ſay, Compoſitiue, Reſolutiue, and Diuiſiue or definitiue.

What is Methode compoſitiue?

It is that whereby we compound the whole of his parts, beginning at the ſmalleſt, and ſo proceede from greater to greater, vntil we come to ỳ chief end whereto we tend, which kind of order or Methode we obſerue heere in writing this Logike: for firſt we treate of words or tearmes, then of a propoſition, and laſt of al of a Syllogiſme: ſo likewiſe he that will teach the rughest way from Norwich to London by order compoſitiue will bidde him firſt goe to Windham, from Windham to Attleborough, from Atleborough to Thetford, from Thetford to Newmarket, from Newmarket to Barkway, frõ barkway to Ware, frõ Ware to Londõ.

What is Methode reſolutiue?

It is ỳ whereby any whole thing is reſolued into his parts: or when we proceede from the end to the next and immediate cauſe thereof, and from that to the next cauſe of that, and ſo from one to another vntill we come to the firſt cauſe of all, and moſt remote and furtheſt off, as when we reſolue a Syllogiſme into his Propoſitions: & a propoſition into his vttermoſt bounds or termes, which are the ſubiect and the predicate: and this way is vnlike to th'other before recyted, becauſe it goeth backward, as in the former example. If ye will teach the way from Norwich to London by Methode reſolutiue, ye muſt ſay that there is a town called Ware twenty myles from London: next to that is a Towne called Barkway, and ſo till yee come to that which was firſt in methode compoſitiue. To theſe two methodes Galen addeth the third methode, that is, Methode diuiſiue or definitiue.

What

What is that Methode?

It is when in defining and deuiding wee descende orderly from a most generall kind to all the speciall kinds contayned vnder the same, and so to the lowest of all: as hauing to speake of quality, we define it and deuide it into his foure speciall kindes, and euery such special kind into his parts and members, euen til we come to the lowest of all, as you see in the table of quality before described. Which kind of Methode is more fully handled by one Leonard Accontio in his litle Treatise which he wrote in Latin de Methodo, the effect of which booke I thinke it not out of purpose to set downe euen here.

The effect of Accontius his booke *de Methodo*, which he affirmeth to be the second part or Office of Logike.

FOr the first office of Logicke teacheth howe to finde out the truth in any speech, but Methode teacheth how to attaine to the Art or knowledge of any thing. In which Methode three things, as he saith, are to be considered. First what Methode is: Secondly what is the effect or vttermost ende thereof: Thirdly what be the causes of that end or effect.

Methode is a certaine right way whereby we may search out the knowledge of any thing and hauing attained it how to teach the same commodiously to any other without examining whether it be true or false, for that belongeth to the first part of Logicke.

The effect or vttermost ende of Methode is the knowledge of any thing.

The causes of that ende are these three, forme, matter, and cause efficient.

Forme here seemeth to be that which is knowne by al ỹ parts of such knowledge being gathered together, as it were into one selfe body. which parts are these: first what the thing is, secondly what be the causes thereof, and also what be the causes of those causes, euen to the last or vttermost cause: Thirdly what be the effects and also what be the effects of those effects as well when the thing is taken generally as for some whole thing, or as when the whole is deuided into all his parts, euen vnto the parts indiuisible.

Matter

Matter here is generally taken, and not for the matter of any determinate or certaine kinde, vnto which matter doo appertaine all things that be finite, perpetuall and immutable, that is to say all vniuersals.

The causes efficient are partly those thinges that are more knowne, as first to know what the thing is by definition consisting of the generall kinde and of the differences thereto belonging: secondly what is the effect or ende of the thing as in those things which doo not depend vpon our will: and thirdly what be the causes of that end or effect, the consideration of which ende belongeth to those things which doo depend vpon our will, and partly the cause efficient is the right applying or ordering of the more knowne thinges: which order containeth two partes, for first we must proceede alwayes from the most generall kinds to the next generall kindes, as hauing to begin with the definition of the thing which you seeke to know when need requireth, you must proceede from the most generall kinde of all, that is to say, from the highest generall kinde and so descend downeward vntill you come to the thing that is to be defined, but if you haue to begin from the vttermost end of the thing, then next of all consider that, from whence the end doth immediatly spring, and what doth follow next to that, and so proceede from one to another till you come to the first cause of all. Finally if you haue to beginne from the first causes, then you must orderly proceede from that which is first vnto the second, and so to the third, & so forth vntil you come to the vttermost effect or last end.

Nowe as touching the seconde part of applying or ordering the more knowne thinges, you must haue consideration of euery whole thing and of all his parts, wherefore if you haue to define any thing, art, or scyence: whereof you treate, you must define the whole and then euery part thereof vntill you come to the lowest part thereof, and yet euery one in his proper place, and if you cannot comprehend in one definition all those thinges that are to bee referred to one head, then vse diuision in deuiding the whole into his parts, and define euery such part in order. But if all the parts which the thing containeth haue not one selfe ende, but diuers, then deuide it by such differences as euery part may haue his proper end.

Moreouer if the forme, matter, or cause efficient haue diuers respects and considerations, then according to that diuersity make diuers deuisions, and first declare what is common to all the partes in generall, and what is proper to euery one in particuler.

Finally if some one whole thing lieth hidde, then it is to be found out by looking into some of the particuler parts thereof. And these are all the chiefest poynts contayned in the Latine treatise which my freend Acontius wrote de Methodo: and though that Petrus Ramus maketh but one kynd of Methode, that is to say, to proceede from the first principles or elements: yet I am sure he will not deny but that to goe forwarde and backward be two diuers things, though not contrary, as doth well appeare by the Compositiue and Resolutiue Methode before defined.

I doe not yet perfectlie vnderstande by all this, with what Methode a simple question is to be handled: therefore I pray you shew the true way and order thereof.

The Methode or way in handling a simple question dependeth vpon these 9. Interrogatiues, that is to say. 1. First what significations the name or word hath, whereof the question is made, and how it is to be taken. 2. Secondly whether there be any such thing, or not. 3. Thirdly what it is. 4. Fourthly what be the parts or speciall kyndes thereof. 5. Fiftly what be the causes. 6. Sixtly what be the effects. 7. Seuenthly what things be incident or appurtenant vnto it. 8. Eightly what things are like vnto it. 9. And ninthly what thinges bee contrary to it. All which questions Aristotle reduceth into these fowre, that is to say, whether it be? what it is? what manner of thing it is? and why it is?

Giue example of a simple question handled according to the nyne questions before recyted.

As for example, if we haue to treate of vertue, first we must shew the diuers significations of vertue, for vertue signifyeth sometime power and ability, as when we say, vertue attractiue, vertue digestiue or vertue expulsiue: but here vertue is to be taken for a morall habite bringing forth good and commendable actions. Secondly whether vertue be or not it playnly appeareth by the diuers doings of men, whereof some be good, some be bad. Thirdly what vertue is we know by the definition thereof, in saying that vertue is a morall habite enclyning mans will to do that which is alwayes good and agreable to true iudgement. Fourthly the kyndes of vertue be diuers, as Prudence, Iustice, Temperance, Fortitude, modesty and such like. Fiftly the causes of vertue be also diuers, for the cause efficient thereof is good, and mans will obedient to true reason and to true iudgement, the matter or subiect of vertue is the mind or heart of man, the finall cause is blessednes. Sixtly the effect of vertue is tranquilitie of the mind and many prosperous successes, and also publike vtili-

tie

tie and peace. Seuenthly things incident to vertue are these, the honour, praise, and commendation of good men. Eightly things of affinitie or like to vertue be all good inclinations, dispositions, or good naturall affections, as to be louing, kind, and mercifull. Ninthly, things contrarie to vertue, be all manner of vices, as pride, couetousnes, hipocrisie, dissimulation, &c.

What methode is to be obserued in handling a compound question?

A compound question is to be handled by arguing and reasoning on both sides, whereof we shall treat hereafter: In the meane time we haue to speake of a Proposition, without the which no argument can be made, for all arguments do consist of propositions.

The end of the second booke.

THE THIRD BOOKE OF LOGIKE.

Of a Proposition. Chap. 1.

WHat is a Proposition?

It is a perfect speech whereby something is manifestly declared to be true or false.

Whereof is such speech specially compounded?

Of Noune and Verbe, which Noune would bee of the Nominatiue case, and the Verbe of the Indicatiue moode, as when I say, man is a sensible bodie, for the Logitians do seldome allow any such speeches as are eyther of the Optatiue, Imperatiue

tiue, Interrogatiue, or Vocatiue moode, as I would to God I had a good horse, this speech is not accounted to be so true or certaine, as to say, I haue a good horse.

Of how many parts doth a Proposition consist?

Of three, that is to say, the Subiect, Predicat, and Copulat.

What is the Copulat?

It is the Verbe substantiue called in Latine, Sum, es, fui, that is, to be, which doth couple or ioyne the predicat with his subiect, as when we say, man is a sensible bodie: here in this proposition the word man is the subiect, and the word sensible bodie is the predicat, and the Verbe is, is the copulat: which copulat is not alwaies incident to euerie Proposition, and specially when the predicat is some other Verbe, and not the Verbe substantiue, as Plato disputeth, Socrates walketh, which is as much to say, as Plato is disputing, Socrates is walking.

How many wayes is a Proposition diuided?

Three manner of waies, that is according to substance, qualitie, and quantitie. According to substance thus: of Propositions some are said to be categoricall, that is simple, and some hipothetícall that is compound, of which compounde propositions wee mind not to speake before we haue treated of all things belonging to a categorícall and simple Proposition, which is twofold, that is to say, absolute and modall.

What is an absolute categoricall proposition?

It is a speech which affirmeth or denyeth something absolutely without any respect: as when we say, God is true, or euery man is a lyer: and this is otherwise called of the Logicians, Propositio categorica de inesse.

How is a simple Proposition deuided according to qualitie?

Into an affirmatiue and negatiue Proposition.

When is it said to be affirmatiue, and when negatiue?

It is saide to bee affirmatiue when the predicat is affirmed of the subiect: as when I say, that Iohn is learned: And that is negatiue when the predicat is denyed of the subiect, as Iohn is not learned. And note that in such kind of speech the negatiue is alwaies ioyned to the Verbe.

How many waies is a simple proposition diuided according to quantity?

Foure manner of waies, that is to say, into an vniuersall, particular, indefinite, and singular Proposition.

When is it sayd to be vniuersall?

When some vniuersall signe is added to the subiect.

Which words are said to be vniuersall signes?

These:

These: all, euerie, whatsoeuer, whosoeuer, none, no body, not one, none at all, euery where, no where, and such like, as euery man is a lyer, no man is true.

When is it said to be a particular Proposition?

When some particular signe is added to the subiect.

Which call you particular signes.

These: some, any, many, few, and such like, as some man is wise, few are wise.

When is it said to be indefinite?

When the subiect is a common word hauing neyther vniuersall nor particular signe added vnto it, as when we say, men in these dayes be giuen to great follies.

When is it said to be singular?

When the subiect is some Indiuidum, as when we say, that Cicero is eloquent.

What and how many questions do rise of these 3. diuisions.

These three: that is, of what kind? of what qualitie? of what quantitie? in latine thus, quæ? qualis? & quanta? for if it be asked what kind of Proposition it is, then you must answere that it is either Categorical or Hypothetical, that is, simple or compound. And if it be demanded of what qualitie it be, then you must answere, that it is eyther Affirmatiue or Negatiue: if it be asked of what quantity, then you must answere that it is eyther Vniuersall, Particular, indefinite or Singular.

Of the three properties belonging to a simple Proposition. Chap 2.

VVHich are those?

These: Opposition, Equiualency, and Conuersion.

What is Opposition?

It is the repugnancie of two simple Propositions, hauing one selfe subiect, and one selfe Predicat.

How many kinds of opposite Propositions be there?

Foure: Contrarie, Subcontrarie, Contradictorie, and Subalternat.

Which are said to be Contrarie?

A Vniuersall affirmatiue, and a Vniuersall negatiue, as euery man is iust: no man is iust.

Which are ſaid to be Subcontrarie?

A particular affirmatiue & a particular negatiue, as ſome man iuſt: ſome man is not iuſt.

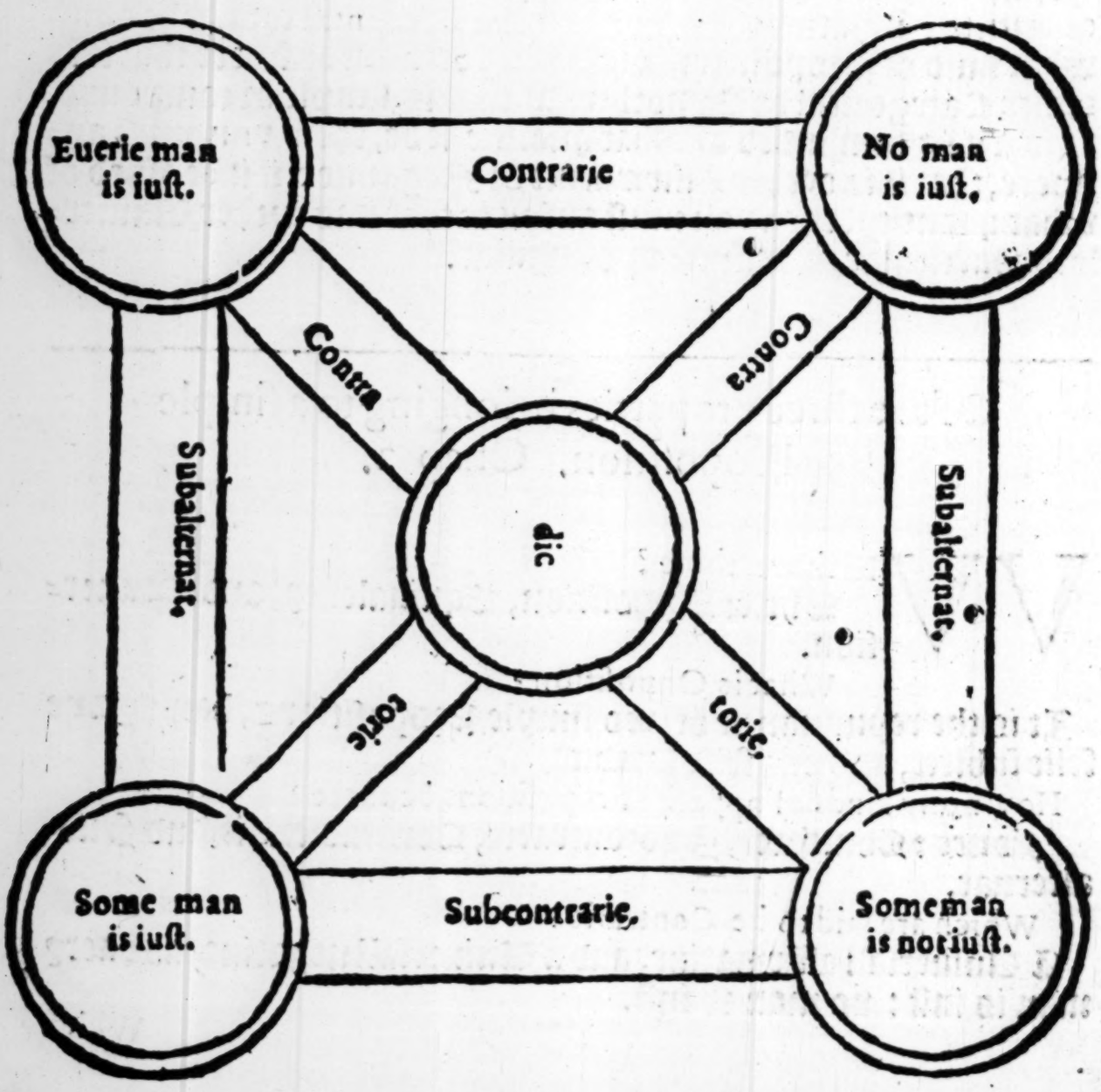
Which are ſaid to be Contradictorie?

Eyther an vniuerſal affirmatiue, and a particular negatiue, or els a vniuerſall negatiue and a particular affirmatiue, as euerie man is iuſt, and ſome man is not iuſt: or no man is iuſt: ſome man is iuſt.

Which are ſaid to be Subalternat?

Eyther a vniuerſall affirmatiue and a particular affirmatiue, or els a vniuerſall negatiue and a particular negatiue: as euery man is iuſt, and ſome man is iuſt: no man is iuſt, & ſome man is not iuſt.

All which kind of oppoſites you may the better remember by conſidering with what order they are placed in this Figure following.



Of the lawes and conditions belonging to these foure kindes of opposites before recited: and of the diuers matter of a Proposition.

Chap. 3.

For the better vnderstanding of the lawes belonging to the opposites, it shall bee necessary to speake somewhat of the matter of a Proposition, whereupon the saide lawes doe partly depend.

How manifold is that matter?

Threefold: (that is to say) naturall, casual, and remote or vnnaturall.

When is a Proposition said to consist of matter naturall?

When the Predicat agreeth with his subiect essentially, or at the least necessarily: as when the generall kind is spoken of his speciall kind, and the speciall kinde of his Individuums, or the difference of his speciall kinde, or the propertie of his subiect: as euery man is a sensible bodie. Iohn is a man: euery man is reasonable: euery man is apt to speake.

When is a Proposition said to consist of matter Contingent?

When the Predicat agreeth with his subiect accidentally, so as it may eyther be, or not be, as Iohn is learned.

When is a Proposition said to consist of matter remote or vnnatural?

When the Predicat agreeth no manner of way with the Subiect, as a man is a horse: a man is a stone, &c.

What are the lawes of contrary Propositions?

Contrarie propositions can bee true no way both together: as euery man is a sensible body, no man is a sensible body: but they may be both false, and specially consisting of matter contingent: as when I say, euery man is iust: no man is iust: which are both false.

What are the lawes of Subcontrary Propositions.

Subcontrarie Propositions consisting of matter naturall, cannot be both false at once, as some man is a sensible body: some man is not a sensible body: but consisting of matter contingent, both may be sometime true, as some man is iust: some man is not iust.

What be the lawes of contradictorie Propositions?

Those can neyther bee true nor false both at once, for if one be

be true, the other muſt needes bee falſe, whether the matter bee naturall or contingent, as euerie man is iuſt, ſome man is not iuſt: no man is iuſt: ſome man is iuſt.

What be the lawes of Subalternat Propoſitions?

If the vniuerſall be true, the particular muſt needes be true: as euery man is iuſt, ergo ſome man is iuſt, but not contrarily: Againe, if the particular be falſe, the vniuerſall alſo muſt needes be falſe, as ſome man is a ſtone: euerie man is a ſtone.

What good is to be reaped by the knowledge of theſe oppoſites?

It teacheth to know what ſpeeches be repugnant one to another, and thereby to diſcerne truth from falſhood.

Of the equiualencie of ſimple Propoſitions. Chap. 4.

What is equiualency?

It is the reconciling or agreeing of two Propoſitions, hauing one ſelfe ſubiect, and one ſelfe predicat, in ſuch ſorte that though they bee diuers in wordes, yet they are made to be all one in ſignification.

How is ſuch reconciliation made?

By the helpe of ſignes eyther vniuerſall or particular, that are of like value, and equall one to another, and thereby make the ſpeeches equall.

Giue example.

As thus: who knoweth not this to be true: euery man knoweth this to be true: there is none but that knoweth this to bee true: all theſe are of like value, and doe ſignifie one ſelfe thing. Againe, ſome men are wiſe, fewe men are wiſe, all men are not wiſe, not many are wiſe, are alſo equiualent ſpeeches. The ſchoolemen doe giue diuers rules touching the equiualencie of ſpeeches: but ſuch as in mine opinion are neyther neceſſarie nor profitable, for that they cauſe many times barbarous, vnuſuall, and intricat ſpeeches. And therefore I thinke good here to paſſe them ouer with ſilence, wiſhing all men to iudge the equiualencie of ſpeeches, rather by the eare and by cuſtome of ſpeaking, and by vſuall manner of taking the ſame in euerie ſeuerall tongue or language, then by any rules, which perhaps will ſerue in one tongue, but not in another.

Of

Of conuersion of simple Propositions. Chap. 5.

WHat is Conuersion?

It is the changing or turning of the subiect and predicate, the one into the others place.

How manifold is such Conuersion?

It is threefold, that is, simple, by accident, & by contraposition.

What is simple Conuersion?

It is that whereby the termes are only changed the one into the others place, the self same quantitie & qualitie being still reserued.

What Propositions are conuerted by this manner of conuersion?

An vniuersall negatiue and particular affirmatiue.

Giue examples of both.

Of the first thus: No vertue is discommendable. Ergo no discommendable thing is vertue: of the second thus, Some man is a Philosopher, and some Philosopher is a man. And by this way sometime vniuersal affirmatiues may be also conuerted, as those whose termes are conuertible, as the special kinde and his difference or propertie: as euerie man is reasonable, and euerie reasonable thing is man: or euery man is apt to speak, and euery thing that is apt to speake is man.

What is conuersion by accident?

It is that whereby the tearmes are changed, and also the quantitie of the Propositions, but not the qualitie.

What Propositions are conuerted this way?

An vniuersall affirmatiue into a particular affirmatiue, and a vniuersall negatiue into a particular negatiue.

Giue examples.

Euerie patience is fortitude: Ergo some fortitude is patience. Againe, no vertue is vice: Ergo some vice is not vertue.

What is conuersion by contraposition?

It is that whereby neither quantitie nor qualitie is changed, but onely tearmes finite into tearmes infinite, that is to say, tearmes limitted into tearmes vnlimitted.

Which call you tearmes infinite?

All Nownes hauing a negatiue set before them, as not man, not beast.

What Propositions are conuerted this manner of way?

An vniuersall affirmatiue into an vniuersal affirmatiue, and a particular negatiue into a particular negatiue.

Giue examples.

Of the first thus: Euery man is a sensible bodie, and euerie thing that is not a sensible body is not man. Of the second thus, some vertue is not Iustice: Ergo some thing that is not Iustice is not vertue. These speeches in English haue some sauour, but to be spoken in latine after the schoole manner, are very barbarous or rather monstrous, as Valerius learneth them, as to say, Quædam non Iustitia non est non virtus.

Of a Modall Proposition. Chap. 6.

WHat is a Modall Proposition?

It is that which affirmeth or denyeth some thing not absolutely, but in a certain respect, sort or moode, which moode is commonly the Predicate in this kinde of Proposition, and all the rest of the subiect called of the Logitians, Dictum.

What is a moode?

Moode is a word determining and limiting the signification of some other worde whereunto it is ioyned, as a wise man, a white horse: for here this word wise being added to man, doth limit & restraine the generall signification of the word man, which otherwise of it selfe comprehendeth both wise and foolish: and the like is to be said of any other generall word, whereunto any such addition is put: but of moodes making modall propositions, there are but these fower, that is, Possible, Contingent, Impossible and necessarie.

How manifold is a Modall Proposition?

Twofold, that is, Coniunct and Disiunct.

When is it said to be Coniunct?

When the moode is placed either in the beginning or ending of a Proposition: as It is impossible that Iohn is sicke: or thus, That Iohn is sicke it is possible.

When is it said to be Disiunct?

When the moode is placed so, as it diuideth the one part of the Subiect from the other: as, for Iohn it is possible to be sicke: and the Disiunct is said manie tymes to be true, when the Coniunct is false, being both made of selfe tearmes: as for example, the Logitians affirme this to be true, A white man it is possible to bee blacke: but this other, A white man to be blacke it is possible, they affirm

affirme to be false.

What maketh them so to doe, sith by construction these two speeches in sense doe seeme to be all one?

Because the moode is the disiunct, which by parting and severing the Subiect, maketh the Proposition to seeme spoken in diuerse respects, as man to be white in one respect, and blacke in another: and so the speech to be true.

Of the Proposition, Equiualencie, and conuersion of modall Propositions. Chap. 7.

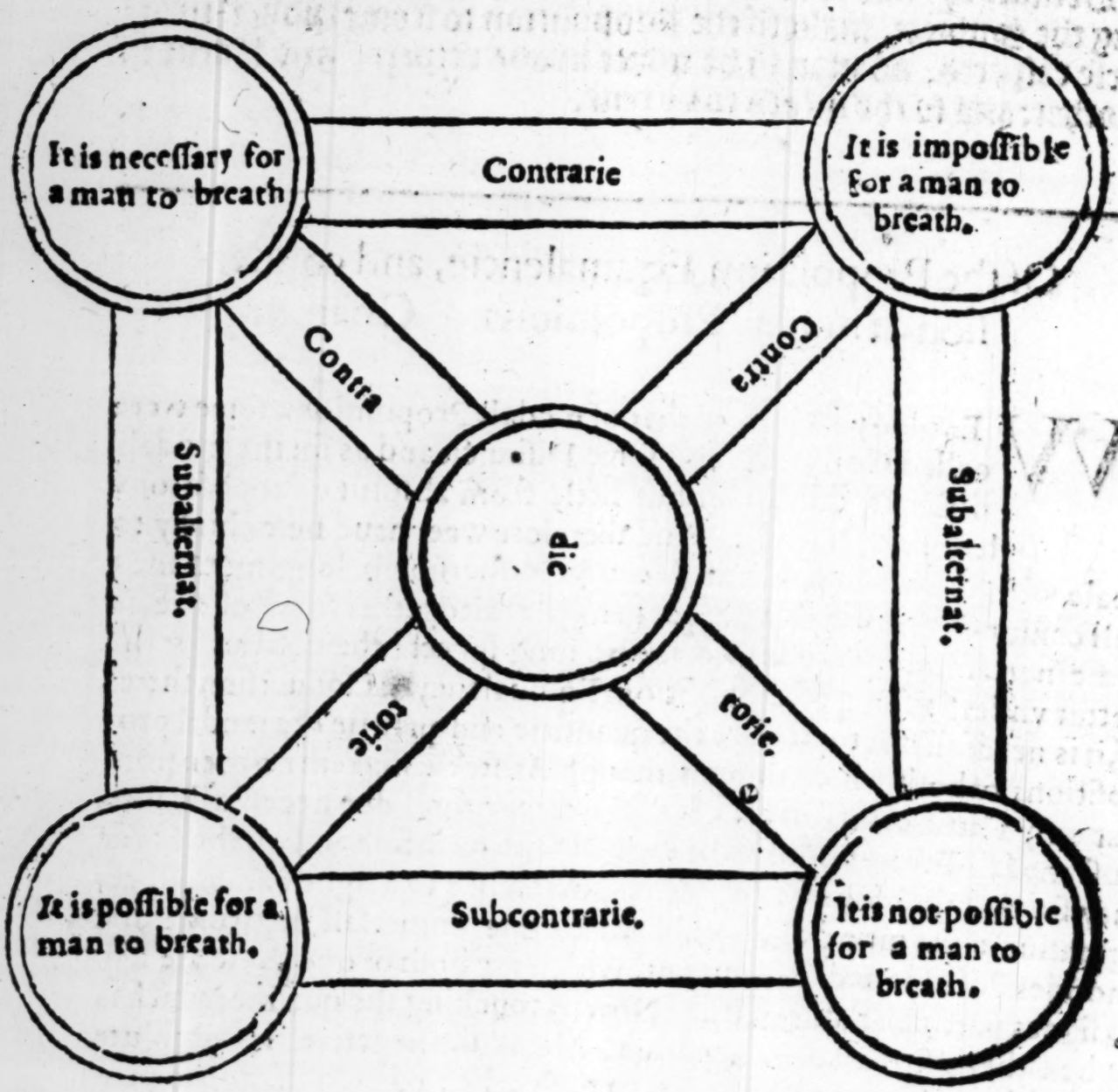
WE tolde you before that of modall Propositions, some were called Coniunct, and some Disiunct: and as for the modals disiunct, they differ but little from absolute Propositions before declared. And therefore wee haue here chiefly to deale with Opposition, Equiualency & Conuersion belonging to modall coniunct, the matter whereof being not altogether so necessarie, as some men affirme, I minde to make no long speeche thereof. But for the better vnderstanding of Opposition, Equiualency & Conuersion thereof, it is needfull first to declare the quantitie and qualitie of a modal proposition: of both which thinges, though Aristotle maketh no mention, but only a little of qualitie: yet the latter writers doe necessarily suppose modall Propositions to be indued with quantitie and qualitie: for they say that the moode necessarie, is much like to a signe vniuersall affirmatiue: the moode impossible to a signe vniuersall negatiue: the moodes Posible and Contingent, which are both of one value are like to signes particular affirmatiue. Now as touching the qualitie, which is to be either affirmatiue or negatiue, like as the negatiue in absolute propositions is wont to be added to the verbe, euen so in modall propositions it is added to the moode, as by the examples set downe in the figure of Opposition hereafter following ye may easilie perceiue.

Of the opposition of Modals. Chap. 8.

HOw manie wayes are modall Propositions said to be opposite?

They are said to be opposite fowr manner of waies, euen as absolute propositions are, that is to say, contrarily, subcontrarily, cõtradictorily, & subcontrarily, as you see

in this figure following, wherein the moode is set before in the place of the Subiect, the better to shew the quantity and qualitie of euery Proposition.



Of the Equiualency and conuersion of Modall Propositions. Chap. 9.

THe Schoolemen doe affirme that Modall Propositions are easilie made equiualent: by reason that they may be vttered fowre manner of waies, that is to say, two manner of wayes affirmatiuely, and two manner of wayes negatiuely: the first way affirmatiuely is

is, when no negatiue is added either to the Subiect or to the moode, as for a man to be iuſt it is poſsible, contingent, impoſsible or neceſſary: the ſecond way affirmatiuely is, whē the negatiue is added to the verbe of the Subiect, the mood remayning ſtil affirmatiue, as for a mā not to be iuſt it is poſsible, contingēt, &c. The firſt way negatiuely is whē the negatiue is only added to the moode, as a man to be iuſt it is not poſsible, contingent, &c. The ſecond way negatiuely is, whē the negatiue is both added to the verb of the Subiect and alſo to the mood, as a man not to be iuſt it is not poſsible, contingent, &c. which is all one and equiualent to this affirmatiue Propoſition ſaying, that for a man to be iuſt it is poſsible, contingent, &c. for two negatiues, aſwell in the Latine tongue as in ours doe alwaies make an affirmatiue. Again as touching the Conuerſion of modall Propoſitions, they ſay that the diſiunct being like to an abſolute or ſimple Propoſition, may be conuerted both ſimplie and per accidens, but the Coniunct ſuffereth no conuerſion: and though the Schoolemen doe ſet down diuers and manifold rules, and haue inuented theſe fower words of art, that is, PVRPVREA, ILIACE, AMABIMVS, EDENTVLI, attributing as well to the Vowels as to the Conſonants thereof certaine ſignifications for the better vnderſtanding and bearing in memorie the equiualencies and conuerſions of the ſaid modall Propoſitions: yet becauſe in mine opinion they are more meete to breed prepoſterous, intricate and barbarous ſpeeches, then to ſerue to any other good purpoſe, I thinke it better to paſſe them ouer with ſilence, then to trouble your memorie therewith: wherefore leauing them as things ſuperfluous, I mind now to treate of an Hypotheticall or compoſid propoſition, & of all the neceſſary accidents therunto belonging.

Of a Compound or Hypotheticall Propoſition. Chap. 10.

WHat is a compounde Propoſition?

It is that which conſiſteth of two or more ſimple Propoſitions coupled together with ſome coniunction.

How manifold is it?

Threefold: Conditional, Copulatiue, & Diſiunctiue.

When is it ſaid to be conditionall?

When the Coniunction (If) is ſet before any ſimple Propoſition, as thus. If it be a man it is a ſenſible bodie.

When is it ſaid to be Copulatiue?

When two ſimple Propoſitions are ioyned together with a

Coniunction Copulatiue, as God is true, and man is a lyer.

When is it saide to be disiunctiue?

When two simple propositions are ioyned together with a coniunction Disiunctiue as thus: eyther it is day or night.

Of how many parts, doth a compound proposition consist?

Of two, that is of the antecedent, and of the Consequent.

Which call you the antecedent?

That which followeth next after the Coniunction, as thus: if it be iustice, it is vertue: here this speech, if it be iustice is the antecedent, & the rest of the speech, that is to say, it is a vertue is the the Consequent, and so it should be though the words were contrarily placed, as thus: it is a vertue, if it be Iustice.

What thinges are to be considered in Hypotheticall propositions?

These: first whether they haue any quantitie, or qualitie, then whether any opposition, equiualence, or conuersion do belong to them or not: Thirdly how to know the truth or falshoode of euery such proposition, be it condicional, copulatiue, or disiunctiue, & first as touching quantitie they haue none at al, for quantitie is to bee measured by signes vniuersall, or particular, which are onely incident to the subiectes of categorical propositions: but qualitie they haue, in that they affirm or deny some thing, by reason whereof there may be contradiction in hypotheticall propositions, but it cannot be properlie said, that they be eyther contrary, subcontrarie, or subalternat, for that they are without quantitie, for want whereof they neither do aptly admit opposition, equiualence, or conuersion, but onely contradiction.

How is that Contradiction to be vnderstoode?

By reason of affirmation or negation, which as in simple positions is to be taken on the behalfe of the verbe copulatiue, and not of the Subiect or predicate, so in compound propositions it is to be taken on the behalfe of the coniunction, hauing a negatiue set before it, and yet not of euery coniunction, but onely of ỹ coniunction condicionall if, whereof I cannot aptly giue you any example in our natiue tongue, because it is contrary to our naturall and vsuall speech to put a negatiue before the coniunction, if, and therefore I leaue to speake thereof any further, and to say the truth, it maketh but a strange kind of speech in the latine tongue, and I beleeue is seldome vsed in any disputation as to say thus: non si animal est, homo est, or non si lux est, dies est, both which are saide to be negatiue speeches, according to the rule before giuen: because the negatiue is set before the coniunction si, and by vertue thereof (as the Schoolmen say) maketh the whole proposition to be negatiue.

Of

Of the truth and falshoode of Hypothetical propositions, and first of the conditionall. Chap. 11.

WHat is to be considered to know the truth or falshoode of Conditionall Propositions?

First whether they be affirmatiue or negatiue, for in the affirmatiues it sufficeth that the one part doth necessarily follow of the other, as thus: If it be a man, it is a sensible body: and it maketh no matter though the parts seuerally taken be both false, so as the Consequent be good: as, If a tree be a man, a tree is a sensible body: for though both these parts bee false, yet the Consequent conditionally is true: for a conditionall Proposition hath no regard to the truth of the parts, but onelie that the Consequent may necessarily follow of the Antecedent.

How is the truth of the negatiue Proposition to be knowne?

By the Consequent: for if the Consequent bee not rightlie inferred of the antecedent, then the negatiue is true, as thus: it followeth not that because a Lyon is a sensible body, that therefore a Lyon is a man.

Of the truth and falshoode of propositions copulatiue.

WHen is a copulatiue Proposition said to be true or false?

It is said to be true, when both the parts be true, as when I say, God is true, and man is a lyar: againe it is said to be false, whē eyther one part or both parts be false: as whē I say, man is a sensible body, and God is not a spirit. Here because the first part is true and the second part false, the whole Proposition is said to be false. It is said also to be false, when both parts are false, as thus, Man is true, and God is a lyar. Heere both parts be false.

What kind of propositions are wont to be referred to this copulatiue?

Those which they call Temporall, Local, by similitude and causall: as of time thus, when a penitent sinner prayeth, then God heareth him. Of place thus, where two or three are gathered together in the name of the Lord, he is in the midst of them. By similitude thus, As a man dealeth with his neighbour, so wil God deale with him. Of the cause thus, Because the Sunne shineth, it

is day. And therefore certaine Aduerbes as these, when, where, Until, so long as, as, so as, for, therefore, because and such like, haue the signification sometime of the Coniunction (And), and sometime of the Connunction (If).

Of the truth and falshoode of disiunctiues.

WHat belongeth properly to disiunctiue Propositions?

To consist of repugnant parts, according to the signification of Coniunctions disiunctiue, such as these bee, vel or eyther, or else, and such like: as eyther it is day or it is night, whereof the one destroyeth the other: for if the one be, the other can not bee: and therefore they can not be both true, but they may be both false, if there be any meane betwixt the two contraries: as when we say, This woman is eyther white or blacke, both these are false if she be browne, which is a meane colour betwixt white and blacke. But the later writers affirme the disiunctiue to be true, if any one or both of the parts be true, as thus, Eyther a man is a sensible body, or else a tree is a Substance: and to be false when both parts be false, as Eyther a man is true, or God is a lyar.

The end of the third Booke of Logike.

THE FOVRTH BOOKE of Logike.

Of Places. Chap. 1.

THough immediatly after the treatise of a Proposition, the olde men are wont to deale with the order of reasoning called Argumentation, and with the formes thereof: yet sith by order of Nature it is meete to find out matter before we go about to form, frame or order the same, and that the matter of proving any Question is to be fetched from certaine common Places, I thought it best to treat at first of those Places, and then to shewe the order of reasoning.

What is a Place?

A Place is a marke or token shewing from whence any Argument apt to proue the Question propounded, is to be taken.

What difference is betwixt Argument and Argumentation?

Argument is the bare proofe or meane tearme which is inuented by him that disputeth to proue the truth of the Question: but Argumentation is the whole reasoning it selfe, of what forme soeuer it be, comprehending both the Question, and also the proofe thereof: whereof we shall speake hereafter in his proper place, and giue you examples of both.

How manifold is Place?

Twofold, the one of persons, the other of thinges: the order & distribution of both which you may plainely see in this Table following.

Hereafter followes the Table of Places.

To what end serueth this manifold diuision?

That the Disputers may the more perfectly know the power and proper nature of euery Argument, according to the great or little force of the Place, from whence such Arguments are fetched.

How is Place diuided according to the Stoolemen?

Into 2. kindes, the one called Maxim, and the other difference of Maxim.

What is Maxim?

It is a generall rule approued and receiued of all Logitians, in such sort as no man will deny the same, as of contrarie things there must needs be contrarie consequents. Againe, what soeuer agreeth with the thing defined, agreeth also with the Definition of the same: and such like.

What is the difference of Maxims?

It is the proper nature of euery Place whereby one Maxim is know one from another, and to what Place euery Maxim belongeth, as from the Contrary, from the Definition, from the thinge defined: by these names and such like, we know to what Place euery Maxim belongeth.

To what end serueth this diuision?

The Maxims serue as shoote quiters and as places of refuge, when the aduersary shall deny our Conclusion: againe the differences being few in number doe cause the multitude of Maxims to be the more easily kept in memorie.

Of the Places of persons. Chap. 2.

Giue examples of all the Places of persons.

Though the Places of persons may be very well applyed to the place of common Accidents hereafter following, because they either goe before, accompany or follow the subiects whereunto they doe belong: yet because there is a difference betwixt persons and things, and that the Places before mentioned in the Table of persons doe more properly belong to persons then to things, I thought it best to giue you examples of euery Place belonging to the person, before I come to treate of the Places of things, and first of the name, then of the stocke and family, and so forth.

Of the name.

Of this Place you may reason either in praise or dispraise more

The Table of Places.

Of Places, some be
- Of Persons, as
  - Name, Stocke, Birth, Nation, Sex, or Kinde, age, Education, habite of the body, affections of the minde, state, calling, or condicion of life, dyet, study or exercise, actes done, death, wonders chancing before death or after death, monuments left of thinges done or written, and kinde of Funerals shewing how well or euill the person was beloued.
    - The Definition and the thing defined,
    - The Description and the thing described,
    - The Interpretation and the thing Interpreted.
- and some bee of thinges, which bee eyther
  - Artificiall Places are eyther
    - Inward Places be either
      - Of the substance it selfe which be these.
        - The matter and the thing made.
        - The Forme and the thing formed.
        - The generall kinde and his special kinde.
        - The difference and his propertie.
        - The whole and his partes Integral.
        - Principall and not principal.
      - Or of thinges accompanying Substance as these
        - Generation and the thing ingendred.
        - Corruption and the thing Corrupted,
        - Vse, Abuse.
        - Subiectes.
        - Adiacentes, and Actions.
        - Apposition.
        - Common Accidentes.
        - Signes and Circumstances, as time place and meane, &c.
    - Outwarde Places bee these
      - The Cause Efficient and his Effect,
      - The End, and the thing ended.
      - The fower Opposites as
        - Relatiues.
        - Contraries,
        - Priuatiues,
        - Contradictories,
      - Thinges diuers in kinde: called in latine, Disparata,
      - Comparison, as more or lesse
      - Like or Vnlike.
      - Example and Comparison,
      - Also to Comparison may be added these places.
        - From the Comparatiue to the Superlatiue.
        - From the Positiue to the Comparatiue,
        - From two Positiues to two Coparatiues
        - From two Positiues to two Superlatiues, and contrariwise.
      - Proportion,
      - Changed proportion.
      - Disproportion,
      - Changed Disproportion,
      - Translation or Figuratiue speech.
    - Or meane places bee these three
      - Coniugates,
      - Cases.
      - Diuision.
  - or Inartificiall places which bee these six
    - Foreiudgementes.
    - Rumors.
    - Tormentes.
    - Wrytinges.
    - Oath.
    - Witnesses.

All which six places are comprehended vnder the place of Authority as you may see in the Table of Authority hereafter following, in which Table are set downe the saide inartificiall places together with the definitions and vses thereof.

To what end serueth this manifold diuision?

That the Disputers may the more [illegible] wer

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Of the name.

Of this Place you may reason eyther in praise or dispraise more

more probably then truly, as to say thus: his name is Goodman, Ergo he ought to be a good man, for that name importeth good. I did once see an euill woman executed at Tyborne, whose name was Sweepstake, which name was answerable to her propertie, which was to sweepe al her louers purses so cleane as she could. Cicero did not lette to skoffe in like manner with Verres the Roman extortioner, against whome he made so many inuyghing Orations, saying many tymes, that hee had not his name for nought, for Verres was almuch to say as a sweeping thief, deriued of the verbe verro, which in English is to sweepe.

Of the stocke or birth.

Of this place you may reason thus: Hee had strong parents, Ergo he is strong. He came of an euill race, Ergo it is no maruaile though he bee euill disposed.

Of the nation.

He is of the Iland of Crete or Candy, Ergo he is a lyar. Hee is a Fleaming, Ergo a drunkard. He is an English man, Ergo a glutton. He is an Italian, Ergo a dissembler.

Of the sex or kinde.

It is ỹ promise of a womã, Ergo not to be performed or trusted.

Of the age.

He is but an Infant, Ergo not malitious. Hee is young of age, and therefore to be pardoned.

Of education.

He was euill brought vp, and therefore can not bee good.

Of the habite of the body.

He is bigge sette, Ergo he is strong. He is red headed, Ergo euill conditioned.

Of the affections of the minde.

He is giuen to excesse and ryot, Ergo he is not temperate or modest: to this place may be referred all manner of vertues & vices.

Of the state, calling, or condition of life.

He is a bond man: Ergo hee can neyther sue nor bee sued.

Of dyet.

He loueth to fare delicately, and to ly soft: Ergo he is lasciuious.

Of study or exercise.

He is very studious and applyeth his booke: Ergo no voluptuous man.

Of things done.

Pompey hath had many prosperous and noble victories: Ergo he is most meete to be sent as Generall of the warre against Mythridates.

Of death.

The death of Scipio was much lamented of the Romaines, ergo he was deerely beloued of the Romanes. Such a one suffered death most constantly for Christs sake, ergo hee was a good Christian.

Of things chancing after death.

Honorable monuments were set vp by the people of Rome in the honour of Iulius Cæsar after his death, ergo hee was honored and beloued of all the people of Rome in his life time. There were great earthquakes, and dead bodies did arise immediatly after the death of Christ, ergo he was the sonne of God, and was vniustly condemned.

Of the Places of things, and first of artificiall Places. Chap. 3.

What be artificiall Places?

Artificiall Places are those wherein are contayned such Arguments as of their owne force and nature are able to proue or disproue: which are diuided (as I said before) into inward, outward and meane Places.

What are inward Places?

Inward Places are those which yeeld Arguments eyther appertaining to the nature and substance of the matter in question, or els to such things as doe accompany the substance and nature of the thing.

Which be the Places of Substance?

These, Definition and the thing defined, together with the rest rehearsed before in the Table.

Of definition and the thing defined.

What is Definition?

It is that which briefly, plainly and properly declareth the nature of any thing, by shewing the substantial parts thereof.

How may a man reason from this Place?

Both affirmatiuely and negatiuely, aswel from the Subiect as the Predicate of the Question. Affirmatiuely thus, Euery resonable body is apt to learn letters, ergo man is apt to learne letters. Negatiuely thus, No vnreasonable body is apt to learne letters, ergo no brute beast is apt to learne letters.

What be the Maxims or generall rules of this Place?

The Maxims be these, what soeuer agreeth with the definition, agreeth with the thing defined: and contrariwise what soeuer agreeth

agreeth not with the definition, agreeth not with ỹ thing defined.

What is the thing defined?

That whose nature and property is declared in the definition.

How may a man reason from this Place?

Both affirmatiuely and negatiuely: affirmatiuely, as Peter is a man, ergo he is a reasonable body. Negatiuely, as an Ape is no man, ergo an Ape is no reasonable body.

What be the Maxims of this Place?

What soeuer agreeth with the thing defined, agreeth also with the definition thereof: and what soeuer agreeth not with ỹ things defined, agreeth not with the definition of the same.

Of Description, and the thing described.

WHat is Description?

It is a speech declaring what a thing is, by shewing the properties and accidents whereby it differeth from other things.

How may a man reason from this Place?

Both affirmatiuely and negatiuely: affirmatiuely thus, Euery laudable habite adorneth his possessor, ergo vertue adorneth his possessor: negatiuely thus, no laudable habite shameth his owner or possessor, ergo no vertue shameth his owner or possessor.

What is the thing described?

It is that whose properties eyther naturall or accidentall are declared in the description.

How are Arguments to be fetched from this Place?

Both affirmatiuely and negatiuely: affirmatiuely thus, This beast is fower footed, hauing long eares and whole feete, ergo it is an Asse: negatiuely thus: This fower footed beast hath no long eares nor whole feete, ergo it is no Asse.

When are arguments to be confuted, being fetched from these Places?

When the definition or description is not true or proper to the thing defined or described.

Of Interpretation and the thing interpreted.

WHat is Interpretation?

It is the declaring of a name lesse knowne by an other that is more knowne, as thus, Iesus is as much to say as a sauiour, a Philosopher is a louer of wisedome.

What is the thing interpreted?

That which is declared by the Interpretation, as this word

Iesus to be a saviour, or this word philosopher to bee a louer of wisedome.

How may a man reason from this Place?

Both affirmatively and Negatively, if the tearmes be conuertible. Affirmatively thus: Hee is a louer of wisedome, Ergo a Philosopher. Negatively thus: He is no louer of wisedome, Ergo no Philosopher.

What be the maxims of these two Places?

The Maxims of these Places are like, for what soeuer agreeth with the one, agreeth with the other, and contrariwise.

Of the Place of Matter and of the thing made.

WHat is Matter?

That whereof any thing is made, as Siluer is the matter of a siluer Cup, & the Cup is the thing made, called of the Logitians materiatum.

How is Matter diuided?

Into Matter permanent and Matter transient.

What is Matter permanent?

It is that which remaineth in the thing made, retaining still both nature & name, as stone & timber is the matter of an house.

What is Matter transient?

It is that which being chaunged doth not returne againe into his first nature: as flower and water beeing made bread will neuer be flower and water againe.

How are arguments to be fetched from Matter permanent?

Both affirmatively and negatively: affirmatiuely thus, Heere is tymber, lyme and stone, ergo here may be an house: negatiuely thus, Heere is neyther tymber, Lyme nor stone, Ergo heere is no house.

How are arguments to be fetched from Matter transient?

Affirmatiuely, but not negatiuely, as here is water and meale, ergo here may be bread: but you can not say, here is no meale, ergo here is no bread: for the matter permanent being taken away, the effect thereof is also taken away: but this Maxim taketh no place in matter transient, vnlesse the Argument be made by the preterfect Tense or time past, as thus: Here was no meale, ergo here is no bread.

What be the Maxims of this Place?

The matter being set downe, the effect also may be according to the difference of the matter.

How

How may we reaſon from the thing made to the matter?

In matter permanent you may reaſon from the preſent Tenſe to the preſent Tenſe, thus: Heere are yron weapons, ergo here is yron. But in matter tranſient wee muſt reaſon from the preſent time to the time paſt, thus: here is bread, ergo here hath bin meale.

What be the Maxims of this Place?

The thing made of matter permanent being ſet downe, the matter alſo muſt needs be; and the thing made of matter tranſient being ſet downe, the matter thereof muſt needs haue beene.

How may you els reaſon from theſe two Places?

By adding theſe two adiectiues (good or euill) as thus: The houſe is good, Ergo the tymber and ſtone was good: for the goodnes or defect of the matter permanent ſheweth the preſent goodnes or defect of the thing made: and any good or euill thing made of Matter tranſient, proueth the Matter to haue beene good or euill.

Of the Places of Forme and ſhape.

WHat is Forme?

Forme is that which giueth ſhape and being to the thing formed, whereof alſo the thing taketh his name, as the ſoule of man is the forme, and man is the thing formed.

How is Forme diuided?

Into
- Forme ſubſtantiall which is the firſt beeing or ſhape of anie thing, and that is eyther
  - Mortall, as the ſoule of a brute beaſt,
  - or immortall, as the ſoule of man.
- And into Forme accidentall, which is a meere accident, called of the Logitians Abſtractum, as whitenes or blacknes.

Howe are arguments to bee fetched from the Forme and the thing formed?

Two wayes, affirmatiuely from the ſubſtantiall forme, thus: Here is the ſoule of a beaſt, Ergo here is a beaſt: from the accidentall form thus: Heere is whitenes, Ergo heere is ſome white thing: from the ſubſtantiall thinge formed thus: The beaſt is here, Ergo his ſoule is here: of the accidentall thing formed thus: Heere is ſome white thing, Ergo heere is whitenes: Negatiuely from the ſubſtantiall forme thus: Here is no ſoule of a beaſt, Ergo here is

no

no beast: of the accidentall forme thus: Here is no whiteness, Ergo here is no white thing: of the substantiall thing formed thus, The beast is not here, Ergo his soule is not here: of the accidental thing formed thus: here is no white thing, Ergo here is no whiteness.

Rehearse the Maxims wherevpon these arguments are grounded.

The Maxims bee these, where Forme is eyther present or wanting, the thinge formed also must needes bee eyther present or wanting, and contrariwise. Yet this Maxim fayleth in the forme of man, for the soule intellective may be, and yet no man, vnlesse you reason from the inbeing of the Forme in the Subiect, as in the body is a reasonable soule, Ergo it is a man: for euerie Subiect hath his name and beeing in his shape or forme, as hath beene said before.

Of the generall kinde.

WHat is generall kinde?

It is that which comprehendeth manie things differing in speciall kinde, as hath beene said before.

Howe are Arguments to bee fetched from the generall kinde to the speciall kinde?

Both affirmatiuely and negatiuely: affirmatiuely thus, Euery vertue is to be desired, Ergo Iustice is to be desired. Negatiuelie thus, No vice is to bee praysed, Ergo drunkennes is not to bee praysed.

Rehearse the Maxims belonging to the generall kinde?

To what kinde soeuer agreeth the general kinde being vniuersally taken (that is to say) pronounced with some vniuersal signe, as All, euerie or none, to the same the speciall kinde doth also agree: and what soeuer agreeth not with the generall kinde vniuersally taken, agreeth not with the speciall kynde: for if no vniuersall signe bee added to the generall kynde, you cannot reason affirmatiuely, but onely negatiuely, thus: It is no sensible bodie, Ergo it is no man: but you cannot reason so affirmatiuely, as to say thus, It is a sensible body, ergo it is a man: because the vniuersall signe All or euerie is wanting.

How manie Places doth this Place of generall kinde comprehende?

Fower, (that is to say) All or euery in quantity, All or euery in respect, All or euery in place, All or euerie in time.

What is All or euery in quantitie?

It

It is when an vniuersall signe is added to the generall kynd, as euery plant liueth, therefore euery tree liueth.

When is it all or euery in respect?

When any generall kinde is vnderstoode in some respect, and that the generall signification thereof is restrayned by some worde added vnto it, or by some secret meaning lymiting the same, as a white beast, a good man: for this worde white restrayneth the generall signification of beast, and this word good the generall signification of man.

Giue examples of this place?

God gaue his holy spirite to all faithfull men, ergo to his Apostles.

What is all or euery in place?

It is when the generall kynde is an aduerbe of place, signifying euery where or no where, as Iustice is no where truely executed, ergo neither in France nor in England.

What is all or euery in time?

It is when the generall kynde is an aduerbe of time, signifying euer or neuer, as God is alwaies with vs, ergo now at this present.

What maximes do belong to these places?

The same that doe belong to the generall kynde vniuersally taken before mentioned, by vertue whereof you may reason both affirmatiuely and negatiuely, as I said before.

Of the speciall kynde.

HOw are argumentes to be fetched from the speciall kinde to the generall kinde?

Affirmatiuely, but negatiuely thus, it is a man, ergo it is a sensible body. But now you cannot say, it is no man, ergo it is no sensible body: for it may be a horse or some other sensible thing.

What be the maximes belonging to the speciall kind?

Where the spectall kinde is, there the generall kinde must also needes bee: againe all the special kindes being taken away, the generall kinde is also taken away.

Of the place of Difference.

THis place is comprehended vnder the place of definition, for difference is a good part of the definition, and yet for order sake I haue

thought good to place it next to the generall kynde and speciall kinde before taught.

How may a man reason from this place?

Both affirmatiuely and negatiuely, as an Oyster hath feeling, ergo it is a sensible body, a horse hath no reason, ergo hee is no man.

What be the maxims in this place?

Whatsoeuer agreeth with the speciall difference agreeth with the thing that hath that difference, and whatsoeuer disagreeth with the speciall difference, disagreeth with the thing that hath that difference, for they be conuertible?

Of the place of Propertie.

How may a man reason from this place?

This place is contayned vnder the place of Description before shewed: And from hence you may reason both affirmatiuely and negatiuely as thus: hee is apt to speake, ergo hee is a man: he is not apt to speake? ergo he is no man.

What be the maxims of this place?

Whatsoeuer agreeth with the propertie, agreeth also with the thing that hath that propertie. And whatsoeuer disagreeth with the propertie, disagreeth also with the thing whereto such property belongeth, for they be conuertible.

Of the place of whole Integrall.

What is whole Integrall?

That which consisteth of partes hauing quantitie.

How may wee reason from the whole to euery particular part?

Affirmatiuely, but not negatiuely, thus: it is a house, ergo it hath foundation, walles and roofe: but you cannot reason so negatiuely from the whole to euery particular part, as to say thus: Here is an house, ergo here is no foundation or walles.

What be the maxims of this place?

If the whole be, euery principall part must needes bee: but if the whole be wanting, some principall part must needes be wanting though not all: for the house might be wanting, and yet the walles and foundation may still remaine.

Of

Of the place of Integrall partes.

WHat is an Integrall part and how is it deuided?

It is that which certaine other partes maketh vp the whole, and such Integrall part is eyther principal or not principall.

Define these two partes?

The principall is that without the which the whole cannot be, as the head or belly of a liuing body, or as the foundation, walles or couering of an house. The part not principall is that without the which the whole may stand, as a house without doores or windowes: or the body may liue without hands or feete.

How may we reason from the principall part to the whole?

Negatiuely thus: here is no foundation nor walles, ergo here is no house · but you cannot reason so of the part not principall, but onely in hauing respect to the perfection of the whole, as thus, here is neither doores nor windowes, ergo the house is not perfect.

What bee the maxims of this place?

If any principall part be wanting, the whole cannot bee. If any part not principall be wanting, the whole is vnperfect.

Of the places of thinges accompanying Substance.

WHat is the place of thinges accompanying Substance?

It is that which comprehendeth such argumentes as are not fetched from the substance of the thing it selfe, but from that which accompanieth the substance thereof.

Which be those places?

These: Generation, the thing ingendred, Corruption, the thing corrupted, vse, subiect, adiacentes, actions, opposition, common Accidentes, and Circumstances and such like.

Of the place of Generation, and of the thing engendred.

WHat is Generation?

It is the first being or springing of any thing.

How are argumentes to be fetched from Generation to the thing engendred?

Affirmatiuely thus: it was good that Christ was borne, ergo Christ was good, it was euill for Rome that Cataline was borne, ergo Cataline was euill to Rome.

What be the Maxims of this place?

Those things whose generation is good, must needes be good, and those thinges whose generation is euill must needes bee euill.

How may we reason from the thing engendred to the Generation?

Affirmatiuely thus: Cataline was euill to Rome, ergo the birth of Cataline was euill to Rome.

What be the maxims of this place?

If the thing engendred be eyther good or euill, the generation thereof must needes be also eyther good or euill.

Of Corruption and the thing Corrupted.

WHat is Corruption?

Corruption is contrary to Generation, and is the destruction of the thing engendred, and the thing destroyed is saide to be corrupted,

How may we reason from Corruption to the thing Corrupted?

Thus, to execute Theeues and Murderers, is profitable to the common welth, ergo Theeues and Murderers are hurtfull to the common welth. The death of Virgil was a great losse to learning, ergo Virgill was a great furtherance to learning.

How may we reason from the thing corrupted to the Corruption?

Affirmatiuely thus: Virgil was a great furtherance to learning, ergo the death of Virgill was a great losse to learning.

What be the maxims of these two places?

Those thinges whereof the ende and destruction is laudable, must needes of themselues be pernitious and hurtfull: And contrariwise those thinges whose end and destruction is hurtfull, must needes of themselues bee good and profitable: Againe of good thinges the losse is euill, and of euill thinges the losse is good: but in reasoning from these places you must take heede that aswell the Corruption, as the thing corrupted be absolutely good or euill of it selfe and not by Accident, for it were no good Argument to reason thus, the death of Christ was good, ergo

Christ

Christ was euill, for his death was good by accident, for our saluation, and not for any crime that was in him: moreouer you must beware that you vse not one selfe predicate both in your antecedent, and in your consequent, for if good bee the predicate in the antecedent, euill must bee the predicate in the consequent, and if euill be the predicate in the antecedent, good must bee the predicate in the consequent: for this kinde of reasoning consisteth of contraries.

Of Vse.

WHat is vse?

Vse is the apt applying of euery thing to his proper end, as the vse of wine to comfort the stomacke, and to reioyce the hart of man.

How may we reason from this place?

Affirmatiuely thus: the vse of wine is good, ergo wine is good: the vse of art Magicke is euill, ergo the art it selfe is euill.

What be the maxims of this place?

That thing is good or euill, whereof the vse is good or euill.

What is to bee obserued in this kinde of reasoning?

Two things: first that the thing whereof we speake, haue some good or euill vse of it selfe absolutely, and not by accident: secondly that we take not the abuse in stead of the right vse, as to say, wine will make men drunke, ergo wine is not good.

Whereto serue most chiefly these three places last mentioned (that is to say) the place of Generation, of Corruption, and of Vse?

They chiefly serue to proue the naturall goodnes or euilnes of any thing.

Of the Subiect.

HOw is this worde Subiect here taken?

For that whereunto accidents and actions doe belong: and hauing to speake here of common accidentes, I thought it good to speake first of the Subiectes, because all manner of Accidents must needes cleaue to one Subiect or other.

How may we reason from this place?

Affirmatiuely, and Negatiuely: Affirmatiuely thus, it is fire, ergo it is hot and apt to burne, hee is a man, ergo apt to laugh or to weepe. Negatiuely thus, deade men haue no being at all,

ergo dead men are not miserable, he hath no gall, ergo hee cannot be angrie, there be no Pigmeans, ergo they fight not with Cranes.

Which be the Maxims of this place?

If the Subiect be, the naturall accidentes and actions belonging to the Subiect must also needes bee: and the Subiect being taken away, all the accidentes and actions thereof must also bee taken away.

How may such argumentes as are fetched out of this place bee confuted?

When the Accidentes doe not of necessitie belong to the Subiect, as thus, hee is a man, ergo hee is a good Poet, for this accident belongeth not of necessitie to euery man.

Of Adiacentes and Actions.

FOr so much as Adiacentes, otherwise called perpetuall Accidentes, & also naturall and proper Actions belonging to any Subiect bee eyther contayned vnder the place of Property, of Difference, or els of common Accidentes, and haue like kinde of reasoning, I thought good therefore to refer you to those places, whereof some are taught before, and some do follow hereafter.

Of Apposition.

WHat is Apposition?

Apposition is when a thing sheweth what his owne quality or operation is by being put or added to another thing, as, white Chalke being put to a wall will make the wall whyte, and thereby Chalke sheweth it selfe to be whyte, so likewise Inke being put to paper, or such like thing will make it blacke.

How may a man reason from this place?

Affirmatiuely thus: Chalke being put to a wall will make it white, ergo Chalke is white, fire being put vnder a Cauldron of water, will make the water hotte, ergo fire is hot. By this place also a man may proue conuersation or company with others to be good or euill in this sort. This yong man keeping company with that olde man is made vertuous, ergo the olde man is vertuous, he is become a theefe by keeping company with such a person, ergo that person is a theefe. And therefore the Scripture sayeth, cum bonis bonus eris, & cum peruersis peruerteris (that is to say)

say) with the good thou shalt be good, and with the frowarde thou shalt learne frowardnes.

What be the maxims of this place?

If one thing being put to another, endueth the same with any quality, that thing must needes haue the same quality it selfe. I do place this place next to action, because it seemeth to me that it appertayneth to action.

Of common Accidentes.

WHat call yee common Accidentes?

I call those common Accidents, such thinges as are eyther alwayes or for the most part so knit together as the one goeth before or after the other, or els accompany each one the other: whereof some are necessarie, and some probable.

How may we reason from the Necessarie?

Both affirmatiuely and negatiuely, & first affirmatiuely, by the latter part thus. This Appletree hath flowers, ergo it hath budded, it hath fruite, ergo it hath both budded and flowred. This woman is brought to bed of a childe, ergo shee hath conceiued.

Negatiuely by the former part thus. This woman neuer conceiued, ergo shee can bring forth no child. This man neuer studied, ergo hee is not learned.

What bee the maxims of this place?

If the latter bee, the former must needes goe before, and if the former were not, the latter cannot bee.

Of Probable Accidentes, Coniectures, Presumptions, Sygnes, and Circumstances.

HOw may we reason from Probable Accidentes?

From Probable Accidentes you may reason Affirmatiuely thus: The feast of Bacchus is this day celebrated, ergo there will be many drunken this day. The generall Sessions are holden this day, ergo there will be some hanged.

What be the maxims of this place?

If the latter be, it is likely that the former went before, and if the former bee, it is like enough the latter may follow: but you must beware in reasoning from this place, that you fetch not your argument from such Accidentes as chance but seldome, or be indifferent, for such be neither necessarie nor probable, but sophisticall and fallible, as to reason thus. Shee is a fayre woman, ergo shee is vnchast.

In the Iudiciall kinde it helpeth greatly to moue the fact. In the Demonstratiue kinde to praise or dispraise. In the Deliberatiue kinde to perswade or dissuade, and to gather together all Coniectures meete for the purpose, and therefore this place is much vsed of naturall Philosophers to proue thinges by naturall signes, or by Philiognomie: also of Astrologers to proue deathe, mortalitie, and such like, by wonders, and monsters, as by blasting starres, and such like impressions. Also it is much vsed of Chiromancers, Southsayers, and such as vse to iudge by Coniectures, and therefore this place extendeth very far, and serueth to many vses. Hetherto also are referred the places of circumstances, and chiefly of time and place, from whence good arguments may be fetched.

Of Tyme

HOw are argumentes fetched from time?

Negatiuely thus: Pythagoras was not borne in Numa Pompilius time, ergo Numa was not Pythagoras scholler. The ceremoniall lawes of Moses were made but for a certaine time, ergo after that time they do not binde.

VVhat be the maxims of this place?

Nothing can bee without time, for if time bee taken away, the thing also must needes fayle.

Of Place.

HOw are argumentes fetched from place?

Negatiuely thus: Cicero was not at Rome, when Iulius Cesar was slaine, ergo Cicero slew him not.

What is the maxime of this place?

No certaine body or thing is without a place, neither is one body at one time in diuers places: and thus much touching inward places:

Of Outward Places and first of Caules.

VVHich be outward Places?

Outward places be those which appertain to the thing, and

and yet do not cleaue thereunto: of which places the first is of Causes and Effectes.

What is a Cause?

A Cause is that by vertue whereof another thing followeth.

How many chiefe kindes of Causes be there?

Foure, (that is to say) the Cause Efficient, the ende, matter, and shape, of the two last whereof we haue spoken before, because they be inward places, and do belong to the Substance of the thing, and therefore we haue to deale onely here, with the cause Efficient and end.

Of the Cause Efficient.

WHat is that cause Efficient, and how is it deuided?

Cause Efficient is that from whence proceedeth the first beginning of any thing that is made or done, and is the maker thereof: As for example the Carpenter is the Cause Efficient of the house which he maketh, and so is euery Artificer of his own worke. Causes Efficient are deuided into two kindes (that is to say) Cause Absolute, and Cause Adiuuant. Cause Absolute worketh by his own force and vertue, as the fire that burneth. Cause Adiuuant worketh not by himselfe, but is a helper and such cause is sometime principall, as vertue is a Principall Cause of blessed life, and sometime not Principall, as the gifts of the body and of fortune be helpers to the happy life: but not Principall Causes thereof. Againe of Causes, some are of Necessity, without which the thing cannot be made, as the Instrument or matter, and some are saide not to bee of Necessity, as when wee say, the speaking of truth causeth hatred, and yet not of Necessitie. Also of Causes Efficient, some be Vniuersall, and some Particular, as the Eclipse or euill Coniunction of certaine Planetes is the Vniuersall cause of Pestilence: but the corruption of humors in mans body is the particular cause thereof. Againe of causes some be called of the Latines Propinquæ (that is to say) nigh vnto the Effect, as the father and mother be the nighest Causes of Generation of Children. And some be called Remotæ, (that is to say) remoued causes, which be further of, as the Grandsires, and Grandames of the saide children. Moreouer of Causes Efficient some worke by a certaine naturall Necessitie, as those that lacke choise and iudgement, as fire that burneth, and the Sunne that shineth. and all other naturall thinges that doe worke by their own force and vertue. Some againe do worke by Counsell, reason, and free will, as men, Angels, and most chiefly God himselfe.

How may we reason from the Efficient Cause to the Effect?

From the necessary Efficient Cause you may reason both Affirmatiuely and Negatiuely. Affirmatiuely thus, The Sunne is lately gone downe, ergo it is twilight. Negatiuely thus, The Sunne was not vp when Troy was destroyed, ergo Troy was not destroyed in ỹ day time: but from the Efficient not Necessarie you can reason but onely Affirmatiuely thus: hee is slaine, ergo hee is dead: but you cannot say, hee is not slaine, ergo hee is not dead.

VVhat be the maxims of this Place?

The Necessarie Cause Efficient not letted, the Effect must needes follow: as if he hath drunken poison, he must needes dye. But if such Cause fayleth, the Effect also must needes fayle: as the Sunne is not vp, ergo it is not day: hee neuer studied, ergo he is not learned, to which place may be referred the places of occasion, Instrument, Meane, and Generation.

How may we reason from the Effect, to the Cause Efficient?

From the Necessarie Effect, both Affirmatiuely and Negatiuely thus, it is day, ergo the Sun is vp, it is not day ergo the Sun is not vp. From the Effect not Necessarie you may onely reason Negatiuely thus: he is not dead, ergo he is not slain, but you cannot reason so Affirmatiuely as to say, he is dead, ergo he is slaine.

VVhat be the maxims of this place?

The Effect being put, the necessarie Cause must needes bee, and the Effect being taken away, the necessary Cause is also taken away.

VVhen do Argumentes fetched from this place fayle?

When the Cause is not necessarie or proper.

Of the End.

VVHat is End and how is it deuided?

The End is that for whose sake any thing is done, and of endes some be chiefe and last, and some not chiefe but helping: The chiefe is that which is desired for it selfe sake, and such is the best state of euerie thing in his kinde, as blessed life to man: courage, and fiercenes to a horse of seruice: heat & dryues to fire, coldnes and moistnes to water &c. The helping end is that which is desired not for it self sake, but for that it helpeth to attain the chiefest end, and of such helping endes one may be better then another as when we desire money to buy a house, and the house to dwell in &c.

How may we reason from this place?

Both

Both Affirmatiuely and negatiuely, affirmatiuely thus, vertue is good because blessed life is good, negatiuely thus: if adulterie be not good to allure another mans wife, to breake wedlocke is not good.

What be the maxims of this place?

That thing whereof the end is good or euill, is also of it selfe good or euill.

Tell the vse of these places of Causes, and whereto they serue?

The vse thereof is diuers and manyfolde, for sith that in the Deliberatiue kinde two principall questions are to bee discussed, first whether the thing bee profitable, and secondly whether it may be possible and conueniently done or not. Argumentes to proue the first, are to be fetched out of the end and effect. And to proue the second out of the Cause Efficient. Also in the kind Demonstratiue to praise or dispraise. Arguments are to be fetched out of the End and Effect. Thirdly in the Iudiciall kinde, wherein doubt riseth of the fact, and will of the doer, Argumentes are to be fetched from the end to proue or dispproue the same. Finally these places together with the other two Causes, Matter and Forme before taught, doe serue to make those kindes of Definitions which we call Causall.

Of Opposites.

WHat be Opposites?

Thinges contrary one to another.

How many kindes of Opposites be there?

Fower (that is to say) Relatiues, Contraries, Priuatiues, and Contradictories.

And first of Relatiues.

WHen are thinges saide to be Opposites by Relation?

When according to their owne significations they haue mutuall Relation one to another, as the Father and the Sonne.

How may we reason from this place?

You may reason from the Affirmation of the one to the denyall of the other, thus: Augustus was Octauius his sonne, ergo hee was not his Father.

What be the maxims of this place.

Syth Relatiues be alwayes together by nature if the one be, the

other muſt needes bee, and if the one bee taken away the other is alſo taken away.

What is to bee obſerued in fetching Argumentes from this place?

You muſt beware that you haue one ſelf reſpect, and not diuerſe, for to reaſon thus is no good Conſequent, This man is a father, ergo hee is no ſonne, or thus, This man is his Superior, ergo not his Inferior, for in diuerſe reſpectes he may be both a Father and a Sonne, a Superior and Inferior, a Superior in one reſpect, & Inferior in another.

Of Contraries.

VVHat be Contraries and how are they deuided?

They bee two Extreames Repugnant one to a nother, whereof ſome are called Mediate, (that is to ſay) hauing a mean, and ſome Immediate hauing no meane at all.

How may we reaſon from theſe two kindes?

From the firſt kind you may conclude negatiuely thus, he is prodigall, ergo hee is not couetous: from the ſecond kinde you may reaſon both Affirmatiuely and Negatiuely thus: This man is whole, ergo he is not ſicke, This man is not whole, ergo hee is ſicke.

VVhat be the maxims of this place?

The Maxime of the affirmatiue to the negatiue is the generall Maxim to all Oppoſites thus: whatſoeuer agreeth with the one Oppoſite, muſt needes diſagree with the other Oppoſite: but the Maxime of the Immediate is thus: if one of the Contraries Immediate be not, the other muſt needes bee, as the former examples do plainely ſhew.

Of Priuatiues.

WHat be Priuatiues.

Priuatiues are two Contraries belonging to one ſelfe Subiect apt to receiue the ſame, in the which Subiect, when the one is wanting (at ſuch time as nature doth appoint) the other muſt needes bee.

How may we reaſon from this place?

Two wayes: firſt from affirmation of the one to the denyall of the other, which is common to al Oppoſites, as thus, he is blind, ergo hee ſeeth not. Secondly you may reaſon from the deny-

all

all of the one to the affirmation of the other, thus: hee cannot speake, ergo hee is dumbe. But this kinde of argument is not strong, vnlesse nothing required bee applied to his proper Subiect, and in such time as nature hath appointed, for it were no good argument to say thus: a sucking childe cannot speake, ergo hee is dumbe, or thus, a whelpe of two dayes olde cannot see, ergo hee is blinde: for nature commonly suffereth not the childe to speake before it bee two yeares olde, nor the whelpe to see before it be nine dayes olde.

What be the maxims of this place?

If the one bee not in the Subiect apte to receiue the same at such time as nature hath appointed, the other must needes bee.

Of Contradictories.

WHat be Contradictories?

They bee Contraries hauing no meane, whereof the one denyeth the other.

How may we reason from this place?

Both Affirmatiuely and negatiuely thus: hee is wise ergo hee is no foole: hee is a foole, ergo hee is not wise.

What is the maxim of this place?

If the one be the other cannot bee: for two Contradictories cannot be together at one selfe time, in one selfe Subiect, and in one selfe respect.

Of thinges differing in kynde called of the Latines Disparata.

WHat be they?

They are those thinges that do differ in nature and kind, as a man, a horse, a stone, a tree, whereof euery one differeth from another in kinde and nature.

How may we reason from this place?

From the Affirmation of the one to the denyall of the other, as thus, Peter is a man, ergo hee is no horse.

What be the maxims of this place?

Whatsoeuer agreeth with the one, agreeth not with the other.

What is to be obserued in reasoning from al these kinds of Opposites?

That the Repugnancie consist in the Predicate, and not in the Sub-

Subiect: for it were no good Consequent to say thus: whatsoeuer seeth is a sensible bodie, ergo that which is blind is no sensible bodie, for here the Contrarietie consisteth in the Subiect, & not in the Predicate.

Of Comparison.

HOw may we reason from the place of Comparison?

Three manner of wayes, that is, eyther from the More to the Lesse, or from the Lesse to the More, or from Like to Like.

Of the More.

THese two wordes More or Lesse, how are they to be taken?

wee vnderstand here by More, that which hath more probabilitie, and by the Lesse, that which hath lesse probabilitie.

How may we reason from the More to the Lesse?

Onely Negatiuely, and that three manner of wayes: first from ỹ Subiect, as thus: Cicero was not able to defend this cause, much lesse any other common Orator: secondly from the Predicate thus: if this man bee not able to beare one hundred weight, much lesse two hundred weight: thirdly from the Subiect, and Predicate both together thus: a strong man is not able to beare a hundred weight, ergo much lesse a weake childe, is able to beare two hundred waight.

VVhat is the maxim of this place?

If it preuaileth not in the More, it cannot preuaile in the Lesse.

Of the Lesse.

HOw may we reason from the Lesse to the More?

Affirmatiuely, three manner of waies, as before from the Subiect thus: a little childe was able to beare tenne pound waight, ergo much more a strong man: From the Predicate thus: if Martyres were ready to loose their liues for Christs sake, much more their temporall goodes: From the Subiect, and the Predicate both together thus: Christ suffered most greeuous tormentes for our sakes: ergo wee ought to suffer a little paine for his sake.

What is the maxim of this place?

If the Lesse preuaile, the More must needes auaile.

What

VVhat is to be obſerued in reaſoning from theſe two places?

You muſt beware that you take not the More for the Leſſe, nor the Leſſe for the More, for many times that which ſeemeth to be the More in number or quantitie, is the Leſſe in purpoſe, and contrary wiſe, as for example: to beare a hundred weight is more in quantitie then to beare halfe a hundred weight, and yet in purpoſe it is leſſe, for it is leſſe probable, & leſſe likely to beare a hundred weight, then to beare halfe a hundred weight.

Of Like and Vnlike.

HOw may we reaſon from Like to Like?

When the thing which wee bring to proue is like or equall to the thing that is to be proued: from which place we may reaſon both Affirmatiuely and Negatiuely, thus: Peter is mortal, ergo Paule is mortall. The day Labourer is worthy of his hyer, ergo the Preacher or Teacher: A man ought to be drowned in the ſea for killing his Father, ergo hee ought to be executed with the like death for killing his mother.

VVhat is the maxim of this place?

Of thinges like, like iudgement is to bee made: but note that this kinde of reaſoning of like is more apt to teach and to print in the hearers minde a liuely repreſentation of the thing, then to verge him by any neceſſitie of new proofe to beleeue the ſame, becauſe it is impoſſible, that the two thinges which are to bee compared can be like in all pointes, and therefore this is the weakeſt kynde of argument that is, and yet neceſſarie to ſuch ende as is before declared, and ſpecially for Lawyers, to proue one ruled caſe, or for iudgement by another like. To this place alſo is referred the place of Example.

Of Example.

How may wee reaſon from this place?

Affirmatiuely thus: Peter ſlew Annanias for lying, ergo without al doubt God wil puniſh thoſe that vſe to lye: the maxime whereof is all one, with that of Like before ſet downe.

Of Vnlike.

HOw may we reaſon from this place?

Negatiuely thus: God is not as man is, for man is a lyer,

er, ergo God is true and no lyer.

What is the maxim of this place?

Of things vnlike, vnlike iudgement is to bee made.

Of the degrees of Comparison.

TO the place of Comparison, me thinkes it were not amisse to referre all those places which Aristotle reciteth, and are taken out of the three degrees of Comparison, which children learne in their Accidentes, (that is to say) the Positiue, the Comparatiue, and the Superlatiue.

From the Comparatiue to the Positiues.

HOw may we reason from the Comparatiue to the Positiue?

Affirmatiuely thus: Virgill was a more learned Poete then Horace, ergo Virgill was a learned Poete: hony is sweeter then milke, ergo hony is sweete.

What is the maxime of this place?

If the Comparatiue degree be truely and properly applyed to any thing, the Positiue must needes bee also rightly applyed to the same. I say, here properly to auoide Ambiguitie, for it were no good Consequent to say thus: the sea of Caspia is more sweete then any other sea, ergo it is sweete and not salt: for this worde sweete hath not in this speach his proper signification, but is rather taken, for that which is lesse bitter or salt.

From the Positiue to the Comparatiue.

HOw may wee reason from the Positiue to the Comparatiue?

Onely Negatiuely thus: Zoilus was no learned Poete, ergo hee was not better learned then Homer.

What is the maxim of this place?

If the positiue be denied the Comparatiue also must needes be denyed.

From two Positiues to two Comparatiues and two Superlatiues.

HOw may we reason from two Positiues to two Comparatiues and to

to two Superlatiues at once, and contrarily?

In this manner: that which is good deserueth iustly to bee beloued, ergo that which is better ought more iustly to be beloued. and that which is best, ought most iustly to bee beloued. And much after this manner you may reason from a double Comparatiue to a double Positiue thus: that which is more honest: is more laudable, ergo that which is honest is laudable.

What is to be obserued in reasoning from these degrees of Comparison.

You must take heede that the Predicate bee spoken of the Subiect naturally and necessarily, and not by Accident, for it were no good Consequent to reason thus: hee that is learned is honest, therefore he that is more learned is more honest: for a man may haue much learning, and yet small honesty.

Of Proportion.

WHen are we saide to reason from the place of Proportion?

when two like proportions being compared together, we conclude in this or such like manner: looke what proportion is betwixt 6. and 4. the same proportion is betwixt 12. and 8. but betwixt 6. and 4. is proportio Sesquialtera, ergo betwixt 12. and 8. the like proportion is: for when one number or measure doth comprehend another once and one half thereof, that is called proportio sesquialtera, as 12. and 8. and if it contayne it once and one third part thereof, then it is called proportio sesquitertia, as 8. and 6. for 8. contayneth 6. once and two ouer, which is the third part of 6.

What is the Maxim of this place?

Of thinges hauing like proportion, like iudgement is to bee made.

Whereto serueth this place?

This place is necessarie for Iudges and Magistrates that haue to consider of equitie in causes of iustice, and in rewarding vertue, or in punishing vyce, in which the Geometricall proportion would be alwaies vsed. Some do giue such examples of this place as in my opinion do rather belong to the place of Like then to this place, for the argumentes of this place ought properlie to be fetched out of the Predicament of quantitie, and not out of qualitie, or out of any other predicament.

Of Changed Proportion.

VVHat is changed Proportion?

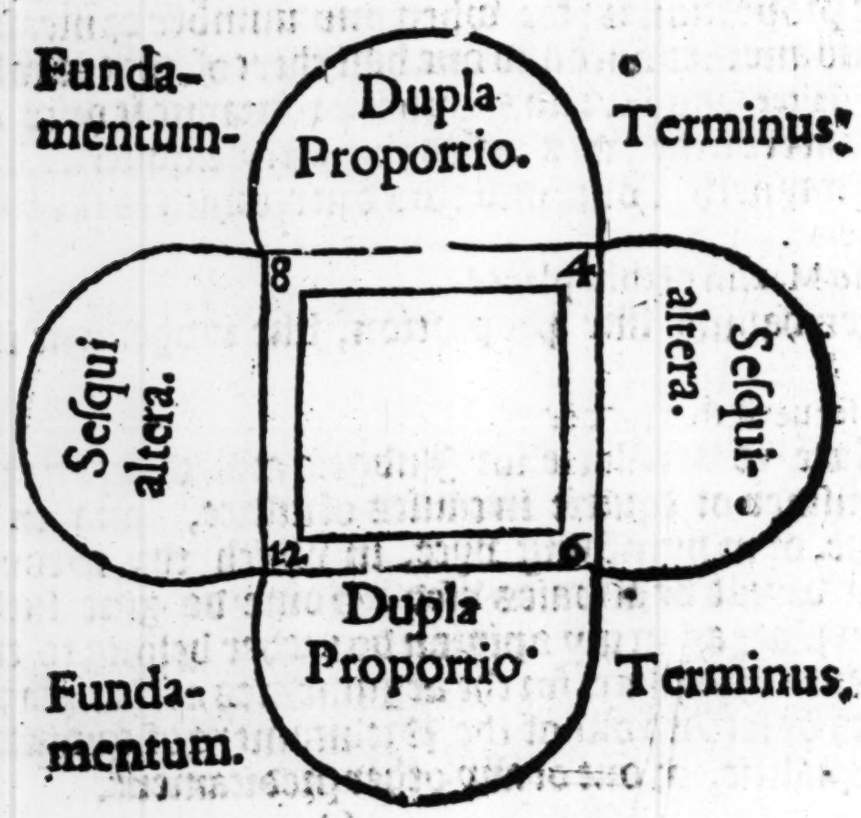
Changed proportion is when the Foundations, and Termes of two like proportions are answerable in proportion aswell amongst themselues as one to another.

What meane ye by these two wordes foundations and termes?

The foundation is that from whence the Comparison first proceedeth, as the Father, and the Yearne, Bownde or end is that whereunto the saide Comparison is applyed, and endeth in the same, as the Son, & therefore the Son is called the term, bownd or ende: whereof wee haue spoken before in the Predicament of Relation.

Giue Examples of reasoning from this place?

Looke as 8. is to 4. so is 12. to 6. (that is to say) in double proportion one to another. ergo as 12. is to 8. so is 6. to 4. for each one contayneth the other once and a halfe, which is called proportio sesquialtera. The manifest Demonstration whereof you may see in this figure here following.



Why

Why is this Proportion saide to be changed or transposed?

Because the order of numbers that are compared, is altered in the conclusion: for in the Antecedent the first is compared to the second, and the thirde to the fourth: but in the Conclusion the third is compared to the first, and the fourth to the second.

Of Disproportion,

HOw may we reason from this place?

Negatiuely thus: 12. is not to 6, as 8. to 6. but 12. to 6. is double in proportion, ergo 8. to 6. is not double in proportion.

What is the maxim of this place?

Of thinges hauing vnlike proportion, vnlike iudgement is to be made.

From Disproportion changed or transposed.

HOw may we reason from this place?

Negatiuely thus: 12 is not to 6. as 4. to 3. for betwixt the two first is a double proportion, and betwixt the two last sesquitertia, ergo 12. is not to 4. as 6. to 3. for the one is a tripla, and the other double.

What be the maxims of this place?

If the first be not to the second, as the thirde to the fourth, then the first shall not be to the third, as the second is to the fourth.

To whome are these places most familiar?

To those that are exercised in the Mathematicall sciences.

Of Translation.

VVHat is Translation?

Translation, otherwise called a Metaphor, is a figure of speech, whereby the proper signification of a worde is changed into an other vnproper, for some likenes that is betwixt the thing signified, and being generally taken, it is rather a Trope, or figure of Rhetoricke, more meet to adorn speech then to proue any thing thereby: notwithstanding being taken here as a place of Logike, you may reason both Affirmatiuely and Negatiuelie, in this sort, a roaring Lyon that seeketh to deuoure, is to bee fea-

red, ergo the Deuill is to bee feared: Loue is blind, ergo they that be in loue are not able rightly to iudge.

What be the maxims of this place?

Whatsoeuer agreeth with the Metaphoricall name, agreeth also with the proper name, and contrariwise.

Of Meane Places.

VVHat be meane Places?

Meane Places are those from whence such Arguments are to be fetched, as do partly agree with the nature of the things to bee proued, and do partly differ from the same.

How are Meane places deuided?

Into Coniugates, Cases, and Diuision.

And first of Coniugates and Cases.

VVHat be Coniugates or Cases?

Coniugates or Cases be like words deriued all of one selfe word, differing onely in termination or ende, as wisdome, wise, and wisely: notwithstanding some vse Coniugates and cases as seuerall places.

Why, wherein do they differ?

Their Difference is very smal, sauing that in Arguments fetched from Coniugates, the Abstract is mentioned, but not in those that are fetched from Cases.

How may we reason from these two places?

Both Affirmatiuely & Negatiuely, from the Coniugates thus: A iust man is to be praised, ergo Iustice is to be praised: a vicious man is not to be praised, ergo vitiousnes is not to be praised. Frō cases thus: He doth all things wisely, Ergo he is wise: He doth nothing wisely, ergo hee is not wise: for in these two last examples the abstract which is wisedome, is not once mentioned: what abstract is, looke before in the Chapter of predication lib. 1. cap. 5. but you must beware in reasoning from this place that your phrase of speech bee naturall and proper, and not vnproper: for it were no good argument to say thus: white is sweete, ergo whitenesse is sweetnesse.

What is the of maxim these two places?

Whatsoeuer agreeth with one of the Coniugates or cases, must needes also agree with the other.

Of

Of Diuision.

VVHat is Diuision?

What Diuision is, and how many kindes there bee, and what is to be obserued in euery kinde hath beene declared before, Lib. 2. Chap. 4. when we shewed the order of defyning and deuiding.

How may we reason from Diuision?

Two manner of waies: first from the denying of one part or more of the diuision, to affirme another parte thereof, as thus: Euerie sensible bodie is whole or sicke, but Peter is a sensible body and not sicke, ergo he is whole: or thus. Of sensible bodies there bee some whole, some sicke, Peter is a sensible bodie and not sicke, ergo he is whole. In these two kindes of examples the diuision consisteth onely of two partes, wherein it sufficeth to deny the one for the affirming of the other. But if the diuision consist of many partes, then you must deny all the partes sauing that which you would affirme, as in this example following: Plato disputeth, is a proposition, but it is neyther vniuersal, particular, nor indefinite, ergo it is a singular proposition: in which kind of reasoning if you leaue out or omit any parte that is to be denied, then the conclusion is naught, for it is no good consequent to say thus: this proposition Plato disputeth, is neyther vniuersall nor particular, ergo it is indefinite. Notwithstanding if you ioyn ỹ part omitted in your Antecedent with a coniunctiõ disiunctiue, ỹ argument may bee made good, as to say thus: this proposition Plato disputeth, is neither vniuersal nor particular, ergo it is either indefinite or singular.

What is the maxim of this first way of reasoning?

The Maxim is thus: whatsoeuer agreeth with the thing diuided, must needes agree with some one of the partes thereof.

VVhat is the second way of reasoning from Diuision?

The second way is to proceede from the affirming of one of the partes to the denying of the other, if it consist but of two, or to the denying of all the rest, if it consist of many. Of two parts let this be your example: Of sensible bodies some be whole, some sicke, but this sensible bodie is whole, ergo hee is not sicke. Of many partes thus: of propositions one is vniuersall, another particular, one indefinite, another singular: but this proposition Plato disputeth, is singular, ergo it is neither vniuersall, particular, nor indefinite.

What is the maxim of this way of reasoning?

Whatsoeuer agreeth with one of the parts, must needes disagree with all the rest, for euery good diuision would bee made of partes meere repugnant, or at the least diuers in kinde one from another: for it is a principal condition requisite to diuision, wherupon the second way of reasoning is grounded euen as the first way is grounded vpon another good condition belonging also to diuision, which is that the thing diuided may not contain more or lesse then his proper partes.

Of inartificiall places.

HAuing sufficiently spoken of places, inward, outwarde, and meane, which as I said before are places artificiall, it is meet now that we speake of the places inartificiall, which according to Quintilian be these six, Foreiudgements, Rumors, Torture, Writings or Euidences, Oath, and Witnesses: All which are briefly and plainely set forth in the table of authoritie here following, because they are all contained vnder the place of authoritie.

Of Authoritie.

HOw is Authoritie here to be taken?

Authoritie is here to be taken for any testimonie worthy of credite,

How may we reason from this place?

Affirmatiuely thus: the learned Philosophers say that there be foure elements, whereof all other thinges are mixt and compounded, ergo it is true. Christ saith that whosoeuer is baptised, and beleeueth in him shall be saued, ergo it is true.

VVhat be the Maxims of this place?

Whatsoeuer is allowed by the most part of the wise and learned, is to be beleiued as a thing probable, neyther ought we rashly to dissent from their opinion and iudgement. Againe, euery man is to be beleiued in his owne art, but for so much as Authoritie is two fold (that is to say) diuine and humaine, and that all arguments fetched from this place bee not of like value, for some bee true and infallible, some probable, and some sophisticall: this table therefore here following shall plainely set forth euery kinde by it selfe, whereby you shall easily discerne the one from the other.

The

The Table of Authority here following.

Authority is twofolde

- Diuine which is twofolde.
  - written.
    - Of the written which we call holy Scriptures, founde arguments are made so long as the words are truely expounded according to the meaning of the holy Ghost. But they be weake and captious if the authority be corrupted eyther by addition, subtraction, or alteration of any worde, sillable, or letter, or by wresting the sense otherwise then the holy Ghost meant it.
  - or vnwritten tradicion
    - As for tradition or vnwritten verity of what valew it is and what credit it hath, I leaue to the iudgement of the learned diuines amongst whome is no small strife and contention in these dayes for the same. The Paynims wete wont to referre to diuine authority the Oracles & answeres of their false Gods, Priestes, Prophetes, and Southsayers, which true Christians ought vtterly to reiect, and to abhorre: notwithstanding *Lactantius* letteth not to proue the birth, death and passion of Christ against the Panimes by Sybels propheſies, because he knew they would giue more credit to them then to the holy scriptures.
- or Humaine which ist hrefolde
  - wrytings as
    - Hystories, Lawes, Statutes, Decrees, Iudgements, ruled Cases, Maxims, *Prouerbes*, Generall rules, Patentes, Warrants, Lycenses, Commissions from the Prince, Charters, Deedes, Releases, Court Rolles, Extentes, Accountes, Obligations, Indentures, wils and Testamentes, and such like.
  - thinges vttered by mouth
    - *If* it be by mouth, it is eyther free and voluntarie, as voluntarie Confession, or Testimony, Rumor, Opinion, and the speech of the wise.
    - Or else forced by oath or torture.
  - And the thirde kinde of humaine Authority is that which is allowed by vse and custome of the people.

As for such Argumentes as are fetched from humaine Authority, the lawes do teach at large, which be sound & which be weake: notwithstanding forsomuch as Quintiliã affirmeth, that the inartificial places, are the six places aboue mentioned, I haue thought good to set downe according to Valerius, the definition of euery place, and briefly to shew how euery such place may bee confirmed or impugned.

And first of Foreiudgements or Ruled Cases.

WHat call you Foreiudgementes or Ruled Cases.

They bee iudgementes or sentences heretofore pronounced, whereby Iudges take example to giue like iudgement in like cases.

How may a man confirme or impugne Foreiudgementes?

You shall confirme them by aggrauating the authority of those that first pronounced them, and by the likenes of the Cases: but you shall impugn or confute them by extenuating or diminishing the authority of the first pronouncers, and by the vnlikenes of the Cases.

Of Rumor and Fame.

WHat Difference is betwixt Rumor and Fame?

Rumor is a particular assertion or affirmation proceeding of some suspition, without any certaine author. But Fame is a common affirmation hauing some certaine author: eyther of which whosoeuer will impugne, must call it an vncertaine brute or clamor, taking his beginning first of malice, and his encrease through credulity and lightnes of beliefe, and that the same may chance to the most innocent man, that is through the Fraude of his enemies, publishing abroad false surmises against him. Contrarily he that will defend Fame or Rumor must say that it riseth not of nought, nor is spread abroade without some iust cause, & that it is accounted as a publike Testimony according to the olde Prouerbe, which sayeth, vox populi, vox Dei, the voice of the people is the voice of God.

Of Torture.

WHat is Torture?

Torture is a painefull kinde of punishment, inuented for the

the inquisition of truth, and violently to wrest or wring the same out of such as would not otherwise confesse it.

How is this place to be confirmed or impugned?

It is to bee confirmed by aggrauating the necessarie vse of torture for the finding out of the truth: but who so will impugne it must say, that such torture causeth many times more lies then true tales to be told, for those that bee strong and able to endure paine, and of a resolute mind, will neuer yeeld for any torment to say otherwise then they list themselues. Againe, if they be weake and not able to suffer paine, it maketh them to say whatsoeuer you will haue them, be it neuer so false.

Of Writings and Euidences.

WHat is meant by Writings?

Deedes, Indentures, Releales, Obligations, and such like other Euidences before rehearsed.

How is this place to be impugned?

You may impugne Euidences or writings, if ye can proue them to be vnperfect any manner of way, as to be forged, to bee made by some collusion or fraude, or to bee extorted by force from some that was put in feare, and such like.

Of Oathes.

WHat is an Oath?

It is a religious affirming or denying some thing, by calling God to witnesse, which is the strongest bond that may be to bind mans faith and conscience.

How is this place to be confirmed or impugned?

He that will proue by this place must aggrauate the integritie, honestie and holinesse of the parties that are sworne, saying, that the oath of an honest, holy, and religious man is of great importance: And hee that will impugne it must doe cleane contrary: saying, that they are naughtie men that are sworne, and common Iurors, which by reason of wicked custome of swearing will easily bee forsworne: or he must say that the partie sweareth for feare, loue, hatred, for hope of gaine, reward, and such like.

Of Witnesses.

WHat be Witnesses?

Witnesses be proofes of things done or not done, whose office is to speake what they haue heard or knowne: the confirmation or confutation of which proofe dependeth vpon the goodnesse or euilnesse of the persons.

To what end serueth the knowledge of places?

He that will write or speake of any matter probably, wisely, or copiously: or will vnderstand the effect, tenor, argumentes, and proofes of other mens speeches, and writings, hath as much need to be practised in these places as a Huntsman is in knowing the haunts of his game which he hunteth, for without that he shall wander long time in vaine, and hardly find that which hee seeketh: neyther is it enough to know the places, vnlesse you can apply them and vse them when occasion shall serue, in disputations made eyther by mouth or pen, which requireth a continuall exercise of such as will be perfect therein. And therefore to the intent you might the better learne how to exercise your self in the foresaid places, I haue thought good here to giue you at the least one example set downe by Hunneus in his Logicke: the theame of which example is thus: Man ought to embrace vertue: which theame he doth not onely handle after the Logicall manner with short speech, but also after the Rhetoricall manner with copious speach, vsing therein this threefold order: For first hee bringeth in such proofes as are to be gathered in respect of the subiect of the Theame. Secondly those that are to be gathered in respect of the Predicat of the same: and thirdly those that are to bee had in respect of both.

The Theame or Proposition.

From the definition of the subiect.

MAn ought to embrace vertue.

What arguments are to be gathered on the behalfe of the subiect of this Proposition?

These that follow, and first from the definition thus: Sith of all sensible creatures man is the most noble and most worthy creature, for that he is endued with reason and counsell, and was created like to the image of God: it is most meete therefore that such

such a creature should be like his creator, in life adorned with such vertue and goodnesse as is answerable to true iudgement, which the Logitians would briefly expresse in this manner: it becommeth euery sensible body endued with reason to loue vertue, ergo euery man ought to loue vertue.

From the Etimologie.

IT becommeth euerie creature ẏ is made of the slime of ẏ earth to be voide of all arrogancie and pride, to bee lowlie, humble, and obedient to his creator, and to embrace vertue in obseruing the law of God deuoutly and religiously, wherefore man called in latine homo, of this word humo (that is to say) earth, or rather slyme of the earth, taking his originall from so base and vile a thing ought to bee humble and voide of all pride and arrogancie, and to loue vertue aboue all thinges, being alwayes obedient to God his creator, and readie to do his most holy precepts and commandements.

Logically thus.

Euery sensible creature that is created of the slyme of earth ought to be obedient to his Creator and to embrace vertue, therefore man ought to bee obedient to his creator, and to embrace vertue.

From the matter.

MAn is made of the selfe same matter of which all other vnliuing, dumbe and vnsensible creatures are made, (that is to say) of the fower elementes whereby he is subiect to alteration and corruption: wherefore man ought not to be proude or arrogant, but modest, humble, lowly and obedient, shewing in all the actions of his life, that he is not vnmindful of his base estate and condition, nor ignorant from whence he came, and what he is, euen no better then earth and dust.

Logically thus.

Man is made of a base matter as all other things are, therefore man ought not to be proude, but to loue the vertue of humilitie and obedience.

From the forme or shape of man.

IT hath beene alwaies most firmely and with one whole consent agreed and beleeued euen from the beginning of the world, that the true shape of man is a reasonable soule, immortal and capable of euerlasting blessednesse, which soule God of his goodnesse did breath into man, to the intent that he should continually serue, honour, and obey him during this mortall life, and after death enioy eternall life: what great madnesse were it then to think that man hauing obtained at Gods hands so noble a shape ought not to embrace all noble vertues, and to gouerne all his actions in such godly and vertuous manner as he may at length attaine to the euerlasting ioy whereunto he was first created and formed.

Logically thus:

Man consisteth of a soule capable of eternall felicitie, ergo man ought to loue vertue, whereby he may attaine to that felicitie.

From the generall kind.

SIth it is giuen by nature to euery sensible bodie to seeke his owne safety, and to be best affected (that is) to haue his full perfection according to his kind: the loue of vertue therefore whereby man is made not onely perfect in this life, but also attaineth thereby euerlasting ioy in the life to come must needes bee to him most naturall.

Logically thus.

Euery sensible bodie willingly desireth that which is agreeable to his nature and kind, therefore man must needes loue vertue, as a thing most fit for his kinde.

From the speciall kind.

BOth men and women, rich and poore, young and old, of what state or calling soeuer they be, if they intend to leade a good and godly life haue needs of vertue: wherefore all men that will liue well ought to embrace vertue.

Logically thus.

Both rich and poore, young and old ought to loue vertue, ergo euery man ought to loue vertue.

From the common Accidents.

EVerie man after that hee hath ended this short course of life, must appeare at the last day before the terrible iudgement seat

of God, there to render account of all his deedes and wordes both good and bad, whereas euery man that hath done well shall receyue for his good deedes a most glorious reward, euen life euerlasting: but the wicked for his euill deedes shall be condemned to hell fyre, that neuer shalbe quenched, a iust reward for his desserts: wherefore all men ought in this life to flie vice, and to embrace vertue, from whence all good actions doe spring.

Logically thus.

Euery man shall render accompt at the last day, of all his deedes both good and badde, and shall receiue a iust rewarde according to the same: ergo euery man whilest hee liueth in this world ought to flie vice, and to embrace vertue.

From the cause efficient.

Sith man was created by God the creator of all things, and author of all goodnesse, excellentie, and vertue, and was formed according to the very image & likenesse of God: it behoueth man therefore to imitate his creator, and by leading a godly and vertuous life, to shew that he is somewhat like him, though not able in all thinges to attaine to the perfection of so perfect a patterne.

Logically thus.

God the cause efficient is good, therefore man being the effect ought to be good.

From the end.

The Prophetes and Apostles inspired with the Holy Ghost, author of all truth, by many their writings do testify that the greatnesse and excellencie of that blessednesse whereunto man is created, is such as no man is able to expresse with tongue, nor in his heart or minde to conceyue the same: wherefore syth man is created to such exceeding great blessednesse, it behoueth him to embrace vertue, which is the very meane and way to bring him to that blessednesse.

Logically thus:

Sith most glorious blessednes is the ende of man, man therefore ought to embrace vertue that hee may attaine to that end.

What argumentes are to bee gathered on the behalfe of the Predicate, and from what places?

These that follow and such like, and first from the definition thus.

From the definition of the Predicate.

SIth vertue is a morall habite, whereby mans will and all his actions are alwaies directed to God, and gouerned according to true iudgement, and thereby are made most acceptable both to God and man: Man therefore ought to embrace vertue, from whence such noble fruites do spring.

Logically thus.

Man ought to loue that habite from whence all honest actions doe spring: therefore man ought to loue vertue.

From the Description.

MAn ought with all endeuor to follow that thing whereby he may atrayne not a vaine and transitorie glory, but a true and euerlasting glory, and thereby to be made acceptable both to God and man: wherefore man ought to embrace vertue from whence such glorie springeth.

Logically thus.

That thing is worthy to be beloued of man which getteth him euerlasting glorie: therefore vertue is worthy to be beloued.

From the Etimologie.

SIth vertue if you diligently consider and waigh the signification of the word, is none other thing but a noble affection of the mind, of great excellencie, and most meete for man: it is not to be doubted but that those (which leauing so precious a thing do set their whole delight in seeking after worldly riches and bodily pleasure) are much deceyued and do greatly offend.

Logically thus.

Such excellencie as is most meet for man becommeth man best: therefore vertue becommeth him best.

From the generall kind.

SIth it is well knowne that man ought with all diligence to seeke after those habites whereby humaine nature is best adorned and made most perfect. And that vertue amongst such habites is the chiefe: because that thereby the minde of man is raught to know what truth is, and his will thereby is alwaies inclined to

honest

honest and laudable actions, man therefore ought with all his power and endeuour to embrace vertue.

Logically thus.

Man ought chiefly to loue those habites whereby his nature is made perfect: therfore man ought to loue vertue.

From the speciall kind.

IT is most meete, yea most necessarie for all men to loue fortitude and temperance: for by temperance mans will is bridled and kept from all euill lustes and affections, and by fortitude he is made free from feare of death: and as without temperance mans life cannot be honest, so without fortitude his death cannot be commendable: wherefore it plainely appeareth how necessary a thing it is for a man to embrace vertue, as that which chiefly maketh his life honest and laudable, and his death glorious and honorable.

Logically thus.

A man ought to loue fortitude and temperance, Ergo he ought to loue vertue.

From the corruption of the subiect.

THe destruction of vertue is the cause of most greeuous euils, for the light of vertue being extinct, the minde is immediately wrapped in such darkenesse as it cannot see nor discerne what is honest, what is profitable, or what is hurtfull: by meanes whereof man falleth into most filthy vices, which doe so infect and corrupt the life of man, as it becommeth most detestable both to God & man: whereby it playnely appeareth how noble a thing vertue is, and with what loue and diligence it ought to be embraced of all men.

Logically thus.

The destruction of vertue is euill, therefore vertue is good & worthy to be beloued.

From the vse of the Subiect.

THe vse of vertue maketh mans life commendable, holy, glorious, and acceptable both to God and man: then which nothing can be in this world more to be desired of man: wherfore it manifestly appeareth, that vertue is so noble a thing as all men

ought to bestow all their studie, labour and care in obtaining the same.

Logically thus:

The vse of vertue is good, therefore vertue is good.

From common Accidents.

SIth all men do greatly desire to haue their consciences quieted, and their minds free from all euill lusts, affectes and passions, which with continuall strife do molest the same: and thereby doe cause man to leade a miserable life: man therefore ought to refuse no paine nor labour, so as he may attaine to vertue, which is alwaies accompanied with that tranquilitie of minde & conscience that is so much desired.

Logically thus:

The tranquilitie of the mind and conscience is to bee desired, ergo vertue which is alwaies accompanied with that tranquility is to be desired.

From the cause efficient.

SIth true vertue is not to be gotten by any mans labour, exercise or industrie, without the great grace of God, who is chiefe author and giuer of all good gifts: it well appeareth that vertue is a most excellent thing and most worthy to be had in admiration, and therefore with feruent loue and diligence to bee embraced of all men.

Logically thus.

God the chiefe author of all good is the cause efficient of vertue, therefore vertue proceeding of so worthy a cause must needes bee an excellent thing, and worthy of all men to be embraced.

From the effect.

TRue honor and glorie hath beene alwaies had amongst all men in great admiration: because it seemeth not onely by mans iudgement, but also by the diuine iudgement of God to be alwaies attributed to vertue, wherefore sith vertue doeth yeeld such noble fruites and effects, vertue must needes be a noble thing it selfe, and worthy of all men to be embraced.

Logically:

Logically thus.

The Effect of vertue, which is true honor and glorie, is good and to be desired, ergo vertue is to bee desired.

From the End.

Sith euerlasting blessednesse is of such excellencie, as neyther tongue is able to expresse the ioyes thereof, nor minde to conceiue the same, and therefore ought to bee desired aboue al things as the iust rewarde of all goodnes, and finall end of all euill, and that vertue is the onely meane to bring man to that blessed ende: who then will once thinke that vertue is not to bee esteemed aboue all thinges, and worthy of all men to be embraced.

Logically thus.

The end of vertue which is euerlasting felicity is to be desired: ergo vertue is to bee desired.

Hetherto you haue shewed how the aforesaide Theame is to be proued with argumentes fetched aswel from the Subiect as the Predicate, now shew what arguments are to be fetched frō both ioyned together? These that follow and such like, and first by Comparison, from the Lesse to the More.

From the Lesse to the More.

If men wil not let to bestow any paine, labor or cost to preserue their bodies, from death, sickenesse, or any other hurt, how much more then ought they to endeuor themselues to obtain vertue, which will preserue their soules from all corrupt affections and euill vices, and thereby deliuer them from death euerlasting.

Logically thus.

Man ought to bee carefull of his bodily health, ergo much more of his soules health, which is chiefly preserued by vertue.

From Similitude or Likenesse.

As the beautie of the bodie is pleasant to mans eyes: euen so the beautie of the mind or soule is as acceptable to God: and therefore as man wilbe diligent and carefull in decking and adorning his body to please the eyes of men: euen so he ought to be most carefull to decke his soule and minde, with such vertues as do make the same in Gods sight most acceptable.

Logically thus.

As the decking of the body is pleasant to mens eyes: so the deck-

king of the soule, is pleasing to God.

From Authority.

Dauid the Prophet in the 34. Psalme sayeth thus: Turne from euill, & do that which is good. The Prophet Micheas also agreeth hereunto in saying thus: deale iustly with all men, loue mercy, and walke diligently in the way of God, by which wordes these two godly Prophetes do teach no other thing, then that man forsaking all kynde of vice, shoulde with all diligence embrace vertue.

Logically thus:

God teacheth by his Prophet Dauid, and also by Micheas, that man shoulde flie vice, and loue vertue: ergo man ought to loue vertue. By dayly exercising your selfe in such examples as this is, you shall in short time learne the right vse of the places, and be able thereby readily to apply them to euerie good purpose.

Here endeth the Fourth Booke of Logike.

Of

THE FIFT BOOKE OF Logike.

Of Argumentation, and of the Fower kindes thereof in generall, and also of the first Principles of a Syllogisme.

Chap. 1.

HAuing hitherto sufficiently spoken of words both simple and compound, whereof al questions do consist, also of definition and diuision, of Method, of Propositions, and of the places: It resteth now that I declare vnto you the formes and kindes of reasoning called Argumentation, which be the meanes whereby in al compound questions the truth may be discerned from falshoode, wherein consisteth the chiefest fruite of Logike: and therefore you shall vnderstand that there bee foure principal kindes or formes of Argumentation (that is) a Syllogisme, an Induction, an Enthymeme, and Example. I say here principal, because there be diuers other formes, which though they be not so necessarie, yet I will briefly treat of them hereafter: But forsomuch as the Syllogisme is the chiefest, whereunto all others are referred as thinges vnperfect, vnto a thing perfect, I will first speake of a Syllogisme, and of all the partes thereof: but yet before I define or deuide a Syllogisme, I thinke it very necessarie to declare vnto you the first Principles aswell Materiall, as Regular, of a simple Syllogisme consisting of simple Propositions.

VVhich call you materiall Principles?

Material Principles are three simple Propositions, and three tearmes, (that is to say) the Subiect, the Predicate, and the mean tearm hereafter defined, whereof the Subiect and the Predicate

are saide to be the outermost limites or boundes of any simple proposition.

Why are they called tearmes or limites?

Because they lymmet a proposition, euen as dole-stones or meares do limmet a peece of ground in the fielde, and bee the vttermost partes or bondes whereunto any proposition is to bee resolued, as for example in this proposition, euery man is a sensible bodie: these two wordes, man and sensible bodie, are the tearmes, limmetes, or boundes, whereof as the saide proposition is compounded, so into the same it is to be resolued, as into his vttermost parts that haue any signification: for letters & sillables of themselues be without signification, and therefore can limmet no speech, so that ỹ termes of propositions must be eyther nounes or verbes, which be onely voices significatiue, as haue been saide before.

VVhich be the principles regulatiue?

The principles regulatiue of a Syllogisme be these, two phrases of speech, to be spoken of all, and to be spoken of none.

VVhat is to be spoken of all?

That is when the predicate being truly spoken of the Subiect, must needes be also spoken of all that is comprehended vnder the said Subiect: as when I say euery man is a sensible bodie: here this worde sensible bodie, is not onely spoken of man in general, but also of Peter and Iohn, and of euery other man in particular comprehended vnder the foresaide subiect man.

VVhat is to be spoken of none?

It is when the predicate being denied to be spoken of the subiect, is denied also to be spoken of any thing contayned in the subiect, as when I say, no man is a stone, here like as this word stone is denyed to be spoken of man, so it is also denyed to be spoken of Peter, of Iohn, and of euerie other singular man, out of which Definitions are gathered two necessarie rules.

VVhich be they?

The first rule is whatsoeuer is truely affirmed of his naturall and proper Subiect, is also affirmed of all those thinges which are contayned vnder the saide subiect, the second rule is thus, whatsoeuer is denyed to be spoken of any subiect is also denyed to be spoken of euery thing contained vnder the saide subiect.

VVhereto serue these rules?

The first rule confirmeth all Syllogismes affirmatiue, and the second confirmeth all Syllogismes negatiue.

Of a Syllogisme, what it is, how it is deuided, and of what partes it consisteth.

Chap. 2.

VVHat is a Syllogisme?

A Syllogisme is a kind of argument containing three propositions, whereof the two first commonly called the premisses being disposed according to moode, and figure, and granted, the third proposition otherwise called the conclusion differing from the other two, followeth of necessitie, by vertue of the premisses: how these three propositions are called, and what moode and figure is, shalbe declared hereafter. In the meane time marke wel the two other points touching this Definition: first that the Conclusion must not be al one but differing from the premisses, secondly that the saide Conclusion bee necessarily inferred of the premisses as in this example: euery sensible bodie is a substance: euery man is a sensible bodie: ergo euerie man is a substance: for if the Conclusion were thus, ergo euery sensible bodie is a substance, or euery man is a sensible bodie, the argument should not be good, because the Conclusion should be all one with one of the premisses, the reason why the Conclusion must needes be inferred of the premisses, and so consequently follow of the same, shall bee declared vnto you hereafter.

How is a Syllogisme deuided according to the Schoolemen?

First they deuide it according to the diuersitie of the propositions, whereof it consisteth into two kindes, vz. Categorical, and Hypothetical (that is to say) simple and compound, calling that simple, which is made of simple propositions: & that compound, which is made of compound propositions, what simple & compound propositions are, hath beene before defined. Againe they deuide the simple Syllogisme, three manner of wayes, first according to the diuersitie of the termes into a common and into a singuler Syllogisme, for if the termes whereof the Syllogisme consisteth, be common, or generall, and specially the meane tearme, or proofe, then that Syllogisme is called a common Syllogisme: but if the meane terme or proofe be Individuum, then that Syllogisme is saide to be a singular Syllogisme, called of them, Syllogismus expositorius, whereof we shall speake hereafter, secondlie, they deuide a simple Syllogisme, according to the diuersitie of the Lib. 2. cap. 1.

figure into a perfect, and vnperfect Syllogiſme.

When isit ſaide to be perfect?

When it needeth not to bee altered any manner of way, otherwiſe then it is, that the Conſequent may manifeſtly appeare.

VVhen is it ſaide to be vnperfect?

When the Conſequent doth not manifeſtly appeare, vnleſſe the Syllogiſme be altered eyther by conuerſion, or tranſpoſing of the premiſſes, whereof we ſhall ſpeake hereafter: thirdly they deuide a ſimple Syllogiſme, according to the matter of the Propoſitions, whereof it is made into three kindes, that is into a Syllogiſme Demonſtratiue, Dialecticall, and Sophiſticall: of which three kinds we ſhal ſpeake hereafter, and in their proper places, ſo as in all the Schoolemen make foure ſeuerall diuiſions of a Syllogiſm, the firſt according to the diuerſity of the propoſitions, the ſecond according to the diuerſitie of the tearmes, the third according to the diuerſitie of the figure, and the fourth according to the diuerſitie of the matter of the propoſitions, whereof we haue ſpoken before, and ſhewed how manifolde ſuch matter is: but in the meane time, wee will ſhew you of what partes a ſimple common Syllogiſme conſiſteth.

Of how many partes doth a ſimple Syllogiſme conſiſt?

Of two that is Matter, and Forme.

Of the Matter, and Forme of a ſimple common Syllogiſme.

Chap. 3.

VVHat thinges are ſaide to be the matter of a Syllogiſme?

The matter whereof a Syllogiſme is made, are three tearmes, and three Propoſitions, which wee called before materiall Principles, and the forme conſiſteth of figure, and moode, whereof wee ſhall ſpeake in the next Chapter.

Define what theſe three tearmes be?

The one is called the Maior terme, or maior extreamitie, which is the Predicate of the queſtion that is to bee proued, the other is called the Minor tearme or minor extremitie, which is the ſubiect of the queſtion, and theſe two termes are knit together in the Concluſion, and made to agree by helpe of a third tearme called

the

the meane tearme or proofe.

VVhat is the meane terme?

It is the proofe of the question, which is twice repeated before the conclusion, and not once mentioned in the same.

How is such proofe to bee found out?

Fower manner of wayes (that is to say) by experience, by quicknes of wit, by erudition, and by searching the common places.

Giue examples of all these fower wayes?

1 By experience, as when we affirm that intemperance is to bee fled, because we know by experience, that it consumeth both body and goodes in vaine pleasures. 2 By wit as to proove that the couetousnes of wicked men is infinite: because witte and reason teacheth vs that if couetous men did eyther care for the law of God, or for reason, they woulde not exceede so farre the bownds thereof, 3 by erudicion as to proue that riches are not to bee desired ouer greedily, but to serue necessitie: because it appeareth by the doctrine of S. Paule that such as greedily seeke to be rich, do fall into temptation, and into the snares of the Deuill. 4 By searching the common places, as when the proofe of any question is fetched from any of the common places before taught, as from the generall kinde, from the speciall kind, from the difference, or property, and such like whereof you haue had examples before.

Which be the three propositions whereof a Syllogisme doth consist?

These three, the Maior, the Minor, and the Conclusion.

VVhich call you the Maior?

That which consisteth of the predicate of the question otherwise called the Maior tearme, and of the meane or proofe, being both ioyned together in one selfe proposition, which proposition is the whole strengeh of ỹ sillogisme, for it is the cause and proofe of the Conclusion.

VVhich call you the Minor?

That which consisteth of the Subiect of the question called the Minor tearme, and of the meane or proofe ioyned together, which two propositions are called by one general name, premisses because they goe before the Conclusion.

What is Conclusion?

It is that which consisteth of the Predicate, and of the Subiect, and is the question it selfe concluded.

Giue example.

For example let this bee your question: whether man bee a substance or not, here you haue two extreames or termes, whereof substance being the Predicate is the maior terme, and man being

here the subiect is the minor terme: now to proove that this worde substance is properly and naturally spoken of man as of his subiect, and that you may truly knit these two extreames, or termes together, you must seeke out some cause or proofe otherwise called the meane terme, which being once found out, the sillogisme is soone made: let the meane terme therefore be this worde sensible body, for euerie sensible bodie is a substance, which proofe is fetched from the general kind, then forme your Sillogisme thus, euerie sensible bodie is a substance: but man is a sensible bodie, ergo man is a substance: here you see that the meane terme or proofe is twice repeated before the Conclusion: (that is to say) in the maior proposition together with the predicate of the question called the maior terme, and also in the minor proposition together with the subiect of the question called the minor terme, and not once mentioned in the conclusion. Thus much touching the matter whereof a sillogisme consisteth, now of the forme thereof.

Of the Forme of a Syllogisme.
Chap. 4

YOu saide before that the Forme of a Syllogisme comprehended Figure, and moode, now therefore tell what figure and mood is, and how many of them there be?

Figure is no other thing, but the diuerse placing, or disposing of the meane terme in the premisses: which figure is threefolde, that is first, second, and third, for if the mean tearm, be the subiect in the maior proposition, and predicate in the minor, as in the example aboue, then it maketh a Sillogisme of the first figure, and if it chance to be predicate in both propositions, then it maketh a Sillogisme of the second figure as thus, no stone is a sensible body: but man is a sensible body, ergo no man is a stone: for here the meane tearme, sensible body, is predicate in both propositions: but if the meane be subiect in both propositions, then it maketh a Sillogisme of the third figure as thus: euery man is a substance: euery man is a sensible body, ergo some sensible body is a substance, for here the meane terme that is man, is subiect in both the first propositions, and to these three figures doe belong certaine moodes.

What is a moode?

A mood, called in latine modus, amongst the Logitians, is none other but the true ordering all well of the premisses as of the conclusion

clusion in a sillogisme according to due quantitye qualitie: what the quantitie and qualitie of a proposition is, hath beene taught before. lib. 3. Chap. 1.

How many moodes do belong to the first Figure?

To the first figure do belong 9. Moodes, thus named:

Barbara: Celarent: Darii: Ferio: Baralipton:
Celantes: Dabitis: Fapesmo: Frisesomorum.

Whereof the first foure because they conclude directly, are called perfect moodes, making perfect sillogismes: and the other 5. because they conclude vndirectly, are called vnperfect Moodes, making vnperfect Sillogismes.

What is to couclude directly or indirectly?

That mood is said to conclude directly whē the Maior tearme is made the Predicate, and the Minor tearme the subiect in the conclusion; But if in ỹ conclusion the Minor tearme be ỹ Predicate, and the Maior tearme the subiect, then that Moode is said to conclude directly: as for example: Euery sensible bodie is a substance: Man is a sensible bodie, Ergo man is a substance. This sillogisme concludeth directly, because ỹ Maior tearme substance is the predicate in the conclusion: but if the conclusion were thus, Ergo some substance is a man: then it should conclude indirectly: because this word man which was the subiect of the question in this conclusion is made the Predicate.

How many Moodes do belong to the second Figure?

These foure, Cæsare, Camestres, Festino, Baroco.

How many moods do belong to the third Figure?

These fiue: Darapti, Felapton, Disamis, Datisi, Bocardo, and Ferison: which words being otherwise called tearmes of Art, and euery one consisting of three sillables, were purposely inuented by the schoolemen, to signifie the quantity and qualitie of euery proposition contayned in a Sillogisme, and are briefly set downe in these foure verses following.

Barbara, Celarent, Darij, Ferio, Baralipton:
Celantes, Dabitis, Fapesmo, Frisesomorum:
Cæsare, Camestres, Festino, Baroco, Darapti:
Felapton, Disamis, Datisi, Bocardo, Ferison.

It seemeth to me that these names do not euenly consist each one of three sillables, for in the two first verses there be two moodes or names, whereof the one called Baralipton, contayneth foure sillables, & the other called Frisesomorum, contayneth fiue sillables.

You say true, but these sillables are no part of these two moods, but serue onely to fill vp the verse: for this sillable ton, is no part of the moode Baralip: nor the two sillables morum, are any part of

the Moode Friseso.

What is to be considered in these words of Art or Moodes.

Two things, (that is to say) the vowels and the consonants contayned in euery Moode, and what they signifie.

Which are those vowels and what do they signifie?

The vowelles be these foure, a. e. i. o. whereof a. signifyeth an vniuersall Affirmatiue, e. an vniuersall Negatiue: i. a particular Affirmatiue, o. a particular Negatiue: of all which you shal haue examples in the sixt chapter of this booke here following.

Which be the Consonants and what do they signifie?

Wee shall haue cause to speake of them hereafter in a fitter place.

In the meane time then giue examples of the Moodes belonging to all the figures?

Before we giue examples it shall not bee amisse to set downe certaine rules requisite to all the three figures aswell in generall, as in particular.

Of certaine rules as well generall as speciall belonging to the three Figures.

Chap. 5.

HOw many generall rules be there, which are common to all the three Figures?

Fower: two of quantitie, and two of qualitie.

Which is the first of those that belong to quantity?

In euery Sillogisme it behoueth eyther one or both of the premisses to be vniuersall.

Why so?

Because that of two meere particular propositions nothing by order of Logicke can consequently follow: As for example, this Sillogisme is not good: Some sensible bodie is a man, but some horse is a sensible body, Ergo a horse is man. The like reason is also to be vnderstood when the premisses are indefinite propositions, yea or singular propositions, if the meane terme bee not likewise singular, for then it maketh a Sillogisme expositorie, whereof we shall speake hereafter.

Which is the second rule that belongeth to quantity.

If any of the premisses be particular, then the conclusion also must be particular.

Why so?

Because

Because the conclusion being implyed of the premisses ought alwaies to follow the weaker part of the same premisses, but the particular is alwaies accounted weaker then the vniuersall, and the negatiue weaker then the affirmatiue.

What is the first rule belonging to qualitie?

In euery Sillogisme it behoueth either one or both of the premisses to be Affirmatiue.

Why so?

Because that of two pure negatiue propositions nothing can be orderly concluded, as in this example: No man is a tree, but no Peare tree is a man: Ergo no Peare tree is a tree: which Sillogisme cannot be good, for the premises are both true, and the conclusion is false.

Which is the second rule belonging to qualitie?

If any of the premises be Negatiue, then the conclusion must also be Negatiue.

VVhy so?

Because (as it hath beene said before) the conclusion must follow the weaker part.

Which be the speciall rules belonging to the three Figures?

In the first fower Moodes of the first figure directly concluding the Minor may not be a Negatiue, nor the Maior particular but vniuersall.

In the second Figure the Maior must not be particular, and one of the premisses must be a Negatiue.

In the third Figure the Minor must not be a negatiue, nor the conclusion vniuersall: but as for the quantitie and qualitie of euerie proposition in euery kind of sillogisme, of what Figure soeuer it be, it shall plainely appeare by the vowels, or rather sillables of the Moodes, otherwise called words of art, annexed to the examples hereafter following.

First giue examples of Sillogismes of the first figure, and of his foure perfect moodes directly concluding.

Examples of the foure perfect Moodes belonging to the first Figure.

Chap. 6.

The first Moode of the first Figure is when three termes being giuen, a Sillogisme is made of 2. vniuersall affirmatiues directly cõcluding a vniuersal affirmatiue, as this sillogisme here

following: the tearmes whereof bee these, sensible bodie, substance, and man placed in this sort.

Bar. Euery sensible bodie is a substance,
ba. But euery man is a sensible body,
ra. Ergo euery man is a substance.

The name of this moode is called Barbara, diuided into three syllables, placed in the margent right against the Sillogisme, to shew the quantitie and qualitie of euery proposition, according to the significations of the vowels contayned in euery syllable: and so are all the other names of the Moodes hereafter following. The second Mood is, when three tearmes being giuen, a sillogisme is made of an vniuersall negatiue Maior, and of an vniuersall affirmatiue Minor, directly concluding an vniuersall Negatiue: As for example, let the tearmes bee these: sensible body, a man, a stone, and the sillogisme thus.

Ce. No sensible body is a stone,
la. But euery man is a sensible body,
rent. Ergo no man is a stone.

The name of this Moode is Celarent.

The third Moode is, when three tearmes being giuen, a sillogisme is made of an vniuersall affirmatiue Maior, and of a particular Affirmatiue Minor, directly concluding a particular Affirmatiue: As for example let these be the tearmes: sensible body, substance, and man, and the sillogisme thus:

Da. Euery sensible body is a substance,
ri. But some man is a sensible bodie,
j. Ergo some man is a substance.

The name of this Moode is Darii.

The fourth Moode is, when three tearmes being giuen, a sillogisme is made of an vniuersall Negatiue Maior, and a particular affirmatiue Minor, directly concluding a particular Negatiue: As for example, let these be the tearmes, sensible body, man, and stone: and the Sillogisme thus.

Fe. No sensible bodie is a stone,
ri. But some man is a sensible bodie,
o. Ergo some man is a stone.

The name of this Moode is Ferio.

Examples

Examples of the fiue vnperfect Moodes of the first Figure.

Chap. 7.

GIue examples of the fiue Moodes of the first Figure indirectly concluding?

The first imperfect Moode of the first Figure indirectly concluding, is when the Maior and Minor, being both vniuersall affirmatiues, do conclude indirectly a particular Affirmatiue, as thus:

Ba. Euery sensible body is a substance
ra. Euery man is a sensible body,
lip. Ergo some substance is a man.

The name of this Moode is Baralipton, whereof the last sillable ton is onely to fill vp the verse, as hath beene said before.

The second imperfect Moode is when a Sillogisme is made of an vniuersall Negatiue Maior, & an vniuersall Affirmatiue Minor, indirectly concluding an vniuersal Negatiue, as thus.

Ce No sensible body is a tree,
lan Euery man is a sensible bodie,
tis. Ergo no tree is a man.

The name of this moode is Celantes.

The third imperfect Moode is when a Sillogisme is made of an vniuersall Affirmatiue Maior, and of a particular Affirmatiue Minor, indirectly concluding a particular Affirmatiue, as thus.

Da. Euery sensible body is a substance,
bi. Some man is a sensible bodie,
tis. Ergo some substance is a man,

The name of this Mood is Dabitis.

The fourth imperfect Mood is when a Sillogisme is made of an vniuersal Affirmatiue Maior, and of an vniuersall Negatiue Minor, indirectly concluding a particular Negatiue, as thus.

Fa. Euery ſenſible body is a ſubſtance
pef. No tree is a ſenſible body,
mo. Ergo ſome ſubſtance is not a tree.

The name of this moode is Fapeſmo.

The fift imperfect Moode is when a Sillogiſme is made of a particular Affirmatiue Maior, and of an vniuerſall Negamatiue Minor, indirectly concluding a particular Negatiue, as thus.

Fri Some ſenſible bodie is a ſubſtance,
ſe But no tree is a ſenſible bodie,
ſo Ergo ſome ſubſtance is not a tree.

The name of this Moode is Friſeſomorũ, whereof the two laſt ſillables (as hath beene ſaide before) are only put to make vp the verſe.

Of the foure Moodes belonging to the ſecond Figure.

Chap. 8.

Giue examples of the four Moods belonging to the ſecond figure?

The firſt Moode of the ſecond Figure is when a Sillogiſme is made of an vniuerſall Negatiue Maior, and of a vniuerſall Affirmatiue Minor, directly concluding a vniuerſall Negatiue thus:

Ce No ſtone is a ſenſible body
ſa Euery man is a ſenſible bodie,
re. Ergo no man is a ſtone.

The name of this Mood is Cæſare.

The ſeconde Moode is when a Sillogiſme is made of an vniuerſall Affirmatiue Maior, and of an vniuerſall Affirmatiue Minor, directly concluding an vniuerſal Negatiue, as thus.

Ca Euery man is a ſenſible bodie,
meſ But no ſtone is a ſenſible body,
tres Ergo no ſtone is a man.

The name of this Moode is Cameſtres?

The third Moode is when a Sillogiſme is made of an vniuerſall

uerſall Negatiue Maior, and of a particular Affirmatiue Minor, directly concluding a particular Negatiue: as thus.

Feſ No ſtone is a ſenſible bodie,
ti But ſome man is a ſenſible bodie,
no. Ergo ſome man is not a ſtone.

The name of this Mood is Feſtino.

The fourth Mood is when a Sillogiſme is made of an vniuerſall Affirmatiue Maior, and of a particular Minor, directly concluding a particular negatiue, as thus.

Ba. Euery man is a ſenſible bodie,
ro. But ſome ſtone is not a ſenſible bodie,
co. Ergo ſome ſtone is not a man.

The name of this Moode is Baroco.

Of the ſixe Moods belonging to the 3. Figure.

Chap. 9.

Giue examples of the ſixe Moodes belonging to the third Figure? The firſt is when a Sillogiſme is made of an vniuerſall Affirmatiue Maior, and of an vniuerſall Affirmatiue Minor, directly concluding a particular Affirmatiue, as thus.

Da. Euery man is a ſubſtance,
rap. But euery man is a ſenſible body,
ti. Ergo ſome ſenſible bodie is a ſubſtance.

The name of this Moode is Darapti.

The ſecond Moode is when a Sillogiſme is made of an vniuerſall Negatiue Maior, & of an vniuerſall Affirmatiue Minor, directly concluding a particular Negatiue as thus?

Fe. No man is a ſtone,
lap. But euery man is a ſubſtance,
ton. Ergo ſome ſubſtance is not a ſtone.

The name of this Moode is Felapton.

The third Mode is when a Sillogiſme is made of a particular Affirmatiue Maior, and of an vniuerſall Affirmatiue Minor, directly concluding a particular Affirmatiue, as thus.

Di. Some man is a ſubſtance,
ſa. But euery man is a ſenſible bodie,
mis. Ergo ſome ſenſible body is a ſubſtance.

The name of this Moode is Diſamis.

The fourth Moode is when a Sillogiſme is made of an vniuerſall Affirmatiue Maior, and of a particular Affirmatiue Minor, concluding a particular Affirmatiue: as thus.

Da. Euery man is a ſubſtance,
ti. But ſome man is a ſenſible bodie,
fi. Ergo ſome ſenſible body is a ſubſtance.

The name of this Moode is Datiſi.

The fift Mood is when a Sillogiſme is made of a particular negatiue Maior, and of an vniuerſall Affirmatiue Minor, directly concluding a particular negatiue, as thus.

Bo. Some man is not a ſtone,
car. But euery man is a ſenſible bodie,
do. Ergo ſome ſenſible bodie is not a ſtone.

The name of this Moode is Bocardo.

The ſixt Moode is when a Sillogiſme is made of an vniuerſal Negatiue Maior, and of a particular Affirmatiue Minor, directly concluding a particular Negatiue as thus.

Fe. No man is a ſtone,
ri. But ſome man is a ſenſible body.
ſon. Ergo ſome ſenſible body is not a ſtone.

The name of this Moode is Feriſon.

Thus you haue all the three Figures, together with their Moodes plainely ſet forth with examples.

Of a Sillogiſme expoſitorie.

Chap. 10.

AND now becauſe a Sillogiſme expoſitorie is falſe to bee a Sillogiſme of the three Figures: Therefore it muſt meet in giuing you an example thereof euerie where: for I haue alreadie defined the ſame before.

Yea,

Yea I remember yee ſaid it was expoſitorie when the proofe or mean terme is an Indiuiduum: but if yee giue example, I ſhal the better vnderſtand it?

Let this then bee your example, to proone ſome men to be both Orators & Philoſophers by a ſillogiſme expoſitoric thus: Cicero was an Orator: but Cicero was a Philoſopher, ergo ſome men are both Orators and Philoſophers: again to proove that ſome rich men are not wiſe, thus: Craſſus was not wiſe, but Craſſus was rich, ergo ſome rich men are not wiſe: thus you ſee that this kind of ſillogiſme ſerueth to proove both affirmatiuely and negatiuely, as it were by way of example.

An Obiection concerning the three figures, and moodes belonging to the ſame.

Chap. 11.

TO what purpoſe ſerue ſo many figures and moodes, ſith the firſt figure, and the fower firſt moodes belonging to the ſame are onely perfect, yea and ſo perfect indeede, as the Mathematicians in ſeeking out the truth of any probleme will vſe none other, becauſe the firſt figure alone doth ſuffice to conclude all kindes of problemes whatſoeuer they be, whereby it ſhoulde ſeeme that the two other figures with their moodes be ſuperfluous?

They be not altogether ſuperfluous, for as the firſt figure ſerueth chiefly and onely to conclude an vniuerſall affirmatiue: ſo the ſecond figure ſerueth to conclude an vniuerſall negatiue, and the third figure to conclude both a particular affirmatiue, and alſo a particular negatiue, as you may perceiue very well by the examples before rehearſed, neither be the 15. vnperfect moodes ſo vnperfect, but that they may eaſily be reduced vnto the 4. perfect, by one of theſe wayes here following, (that is to ſay) either by conuerſion, or by tranſpoſing of the premiſſes: or elſe by a ſillogiſme leading to impoſſibilitie, of which three wayes of Reduction we come now to ſpeake: by which thinges it doth plainely appeare what difference there is betwixt a perfect & vnperfect ſillogiſme, for the perfect ſillogiſme hath no need of theſe helpes to make the concluſion manifeſt, as hath beene ſaide before.

following: the tearmes whereof bee these, sensible bodie, substance, and man placed in this sort.

Bar. Euery sensible bodie is a substance,
ba. But euery man is a sensible body,
ra. Ergo euery man is a substance.

The name of this moode is called Barbara, diuided into three syllables, placed in the margent right against the Sillogisme, to shew the quantitie and qualitie of euery proposition, according to the significations of the vowels contayned in euery syllable: and so are all the other names of the Moodes hereafter following. The second Mood is, when three tearmes being giuen, a sillogisme is made of an vniuersall negatiue Maior, and of an vniuersall affirmatiue Minor, directly concluding an vniuersall Negatiue: As for example: let the tearmes bee these: sensible body, a man, a stone, and the sillogisme thus.

Ce. No sensible body is a stone,
la. But euery man is a sensible body,
rent. Ergo no man is a stone.

The name of this Moode is Celarent.

The third Moode is, when three tearmes being giuen, a sillogisme is made of an vniuersall affirmatiue Maior, and of a particular Affirmatiue Minor, directly concluding a particular Affirmatiue: As for example let these be the tearmes: sensible body, substance, and man, and the sillogisme thus:

Da. Euery sensible body is a substance,
ri. But some man is a sensible bodie,
j. Ergo some man is a substance.

The name of this Moode is Darii.

The fourth Moode is, when three tearmes being giuen, a sillogisme is made of an vniuersall Negatiue Maior, and a particular affirmatiue Minor, directly concluding a particular Negatiue: As for example, let these be the tearmes, sensible body, man, and stone: and the Sillogisme thus.

Fe. No sensible bodie is a stone,
ri. But some man is a sensible bodie,
o. Ergo some man is a stone.

The name of this Moode is Ferio.

Examples

Examples of the fiue vnperfect Moodes of the first Figure.

Chap. 7.

Giue examples of the fiue Moodes of the first Figure indirectly concluding?

The first imperfect Moode of the first Figure indirectly concluding, is when the Maior and Minor, being both vniuersall affirmatiues, do conclude indirectly a particular Affirmatiue, as thus:

Ba. Euery sensible body is a substance
ra. Euery man is a sensible body,
lip. Ergo some substance is a man.

The name of this Moode is Baralipton, whereof the last syllable ton is onely to fill vp the verse, as hath beene said before.

The second imperfect Moode is when a Syllogisme is made of an vniuersall Negatiue Maior, & an vniuersall Affirmatiue Minor, indirectly concluding an vniuersal Negatiue, as thus.

Ce No sensible body is a tree,
lan Euery man is a sensible bodie,
tis. Ergo no tree is a man.

The name of this moode is Celantes.

The third imperfect Moode is when a Syllogisme is made of an vniuersall Affirmatiue Maior, and of a particular Affirmatiue Minor, indirectly concluding a particular Affirmatiue, as thus.

Da. Euery sensible body is a substance,
bi. Some man is a sensible bodie,
tis. Ergo some substance is a man.

The name of this Mood is Dabitis.

The fourth imperfect Mood is when a Syllogisme is made of an vniuersal Affirmatiue Maior, and of an vniuersall Negatiue Minor, indirectly concluding a particular Negatiue, as thus.

Fa. Euery ſenſible body is a ſubſtance }
pef. No tree is a ſenſible body, }
mo. Ergo ſome ſubſtance is not a tree.

The name of this moode is Fapeſmo.

The fift imperfect Moode is when a Sillogiſme is made of a particular Affirmatiue Maior, and of an vniuerſall Negamatiue Minor, indirectly concluding a particular Negatiue, as thus.

Fri Some ſenſible bodie is a ſubſtance, }
ſe But no tree is a ſenſible bodie, }
ſo Ergo ſome ſubſtance is not a tree.

The name of this Moode is Friſeſomorũ, whereof the two laſt ſillables (as hath beene ſaide before) are only put to make vp the verſe.

Of the foure Moodes belonging to the ſecond Figure.

Chap. 8.

Giue examples of the four Moods belonging to the ſecond figure?

The firſt Moode of the ſecond Figure is when a Sillogiſme is made of an vniuerſall Negatiue Maior, and of a vniuerſall Affirmatiue Minor, directly concluding a vniuerſall Negatiue thus:

Ce No ſtone is a ſenſible body }
ſa Euery man is a ſenſible bodie, }
re. Ergo no man is a ſtone.

The name of this Mood is Cæſare.

The ſeconde Moode is when a Sillogiſme is made of an vniuerſall Affirmatiue Maior, and of an vniuerſall Affirmatiue Minor, directly concluding an vniuerſal Negatiue, as thus.

Ca Euery man is a ſenſible bodie, }
meſ But no ſtone is a ſenſible body, }
tres Ergo no ſtone is a man.

The name of this Moode is Cameſtres.

The third Moode is when a Sillogiſme is made of an vniuerſall

uerſall Negatiue Maior, and of a particular Affirmatiue Minor, directly concluding a particular Negatiue: as thus.

Feſ No ſtone is a ſenſible bodie,
ti But ſome man is a ſenſible bodie,
no. Ergo ſome man is not a ſtone.

The name of this Moode is Feſtino.

The fourth Moode is when a Syllogiſme is made of an vniuerſall Affirmatiue Maior, and of a particular Minor, directly concluding a particular negatiue, as thus.

Ba. Euery man is a ſenſible bodie,
ro. But ſome ſtone is not a ſenſible bodie,
co. Ergo ſome ſtone is not a man.

The name of this Moode is Baroco.

Of the ſixe Moods belonging to the 3. Figure.

Chap. 9.

Giue examples of the ſixe Moodes belonging to the third Figure? The firſt is when a Syllogiſme is made of an vniuerſall Affirmatiue Maior, and of an vniuerſall Affirmatiue Minor, directly concluding a particular Affirmatiue, as thus.

Da. Euery man is a ſubſtance,
rap. But euery man is a ſenſible body,
ti. Ergo ſome ſenſible bodie is a ſubſtance.

The name of this Moode is Darapti.

The ſecond Moode is when a Syllogiſme is made of an vniuerſall Negatiue Maior, & of an vniuerſall Affirmatiue Minor, directly concluding a particular Negatiue as thus?

Fe. No man is a ſtone,
lap. But euery man is a ſubſtance,
ton. Ergo ſome ſubſtance is not a ſtone.

The name of this Moode is Felapton.

The third Moode is when a Syllogiſme is made of a particular Affirmatiue Maior, and of an vniuerſall Affirmatiue Minor, directly concluding a particular Affirmatiue, as thus.

Di. Some man is a ſubſtance,
ſa. But euery man is a ſenſible bodie,
mis. Ergo ſome ſenſible body is a ſubſtance.

The name of this Moode is Diſamis.

The fourth Moode is when a Sillogiſme is made of an vniuerſall Affirmatiue Maior, and of a particular Affirmatiue Minor, concluding a particular Affirmatiue: as thus.

Da. Euery man is a ſubſtance,
ti. But ſome man is a ſenſible bodie,
fi. Ergo ſome ſenſible body is a ſubſtance.

The name of this Moode is Datiſi.

The fift Mood is when a Sillogiſme is made of a particular negatiue Maior, and of an vniuerſall Affirmatiue Minor, directly concluding a particular negatiue, as thus.

Bo. Some man is not a ſtone,
car. But euery man is a ſenſible bodie,
do. Ergo ſome ſenſible bodie is not a ſtone.

The name of this Moode is Bocardo.

The ſixt Moode is when a Sillogiſme is made of an vniuerſal Negatiue Maior, and of a particular Affirmatiue Minor, directly concluding a particular Negatiue as thus.

Fe. No man is a ſtone,
ri. But ſome man is a ſenſible body.
ſon. Ergo ſome ſenſible body is not a ſtone.

The name of this Moode is Ferſon.

Thus you haue all the three figures, together with their Moodes plainely ſet forth with examples.

Of a Sillogiſme expoſitorie.

Chap. 10.

And now becauſe a Sillogiſme expoſitorie is ſaide to bee a Sillogiſme of the three figures: I thinke it meet to giue you an example thereof heereafter: for I haue already defined the ſame before.

Yea,

Yea I remember yee ſaid it was expoſitorie when the proofeſſor meaneth terme is an Indiuiduum: but if yee giue example, I ſhal the better vnderſtand it?

Let this then bee your example, to prooue ſome men to be both Orators & Philoſophers by a ſillogiſme expoſitorie thus: Cicero was an Orator: but Cicero was a Philoſopher, ergo ſome men are both Orators and Philoſophers: again to prooue that ſome rich men are not wiſe, thus: Craſſus was not wiſe, but Craſſus was rich, ergo ſome rich men are not wiſe: thus you ſee that this kind of ſillogiſme ſerueth to prooue both affirmatiuely and negatiuely, as it were by way of example.

An Obiection concerning the three figures, and moodes belonging to the ſame.

Chap. 11.

TO what purpoſe ſerue ſo many figures and moodes, ſith the firſt figure, and the fower firſt moodes belonging to the ſame are onely perfect, yea and ſo perfect indeede, as the Mathematicians in ſeeking out the truth of any probleme will vſe none other, becauſe the firſt figure alone doth ſuffice to conclude all kindes of problemes whatſoeuer they be, whereby it ſhoulde ſeeme that the two other figures with their moodes be ſuperfluous?

They be not altogether ſuperfluous, for as the firſt figure ſerueth chiefly and onely to conclude an vniuerſall affirmatiue: ſo the ſeconde figure ſerueth to conclude an vniuerſall negatiue, and the third figure to conclude both a particular affirmatiue, and alſo a particular negatiue, as you may perceiue very well by the examples before rehearſed, neither be the 15. vnperfect moodes ſo vnperfect, but that they may eaſily be reduced vnto the 4. perfect, by one of theſe wayes here following, (that is to ſay) either by conuerſion, or by tranſpoſing of the premiſſes: or elſe by a ſillogiſme leading to impoſſibilitie, of which three wayes of Reduction we come now to ſpeake: by which thinges it both plainely appeare what difference there is betweene a perfect & vnperfect ſillogiſme, for the perfect ſillogiſme hath no neede of theſe helpes to make the concluſion manifeſt, as hath beene ſaide before.

Of Reduction, and of the kindes thereof, and also of the signification of certain consonants in the wordes of Art seruing to Reduction.

Chap. 12.

What is Reduction?

Reduction here is none other thing but a declaration, prouing or shewing the goodnes of an vnperfect sillogisme, by a sillogisme of a perfect moode.

How manyfold is such Reduction?

Twofolde for it is eyther offensiue, or els by impossibilitie.

What is Reduction offensiue?

Reduction offensiue is when a sillogisme is reduced to his perfection, eyther by conuersion, or by transposing the premisses, or els by both at once.

What meane yee by transposing of the premisses, for as touching conuersion you haue spoken thereof before, lib. 3. cap. 6.

The premisses are said to be transposed, when the Maior is put in the Minors place, or contrariwise the minor into the Maiors place.

What is Reduction by impossibilitie?

Reduction by impossibilitie is when the goodnes of the sillogisme is so proued, as the aduersarie denying the same, must needes be brought to some absurditie, as to confesse two Contradictories to be both true at once, or some proposition, to be false, which he hath confessed before to be true, or is manifestly true of it selfe. But first wee will speake of Reduction offensiue, and then of Reduction by impossibilitie, and because that Reduction offensiue is done sometime by conuersion, and sometime by transposition, and sometime by both at once, and againe that sometime one of the premisses, sometime both, and sometime no more but the Conclusion onely is conuerted, and that sometime by simple conuersion, and sometime by conuersion per accidens: the Schoolemen for easement of the memorie, haue made eight of the Consonantes besides the vowels in the wordes of art before mentioned, to be significatiue, and to declare how euerie proposition

sition

ſitions ought to bee reduced.

For firſt theſe foure conſonants, b.c.d.f. (with one of the which euery vnperfect moode doth beginne) do ſhew that ſuch vnperfect moodes ought to be reduced into thoſe perfect moodes, which do beginne with the like letter, as,

Baralipton, Baroco, Bocardo, into Barbara,
Celantes, Cæſare, Cameſtres, into Celarent:
Dabitis, Darapti, Diſamis, Datiſi, into Darij,
Fapeſmo, Friſeſomorũ, Felapton, Feriſon, Feſtino into Darii.

Which be the other foure Conſonantes, and what do they ſignifie?

The other foure Conſonantes put betwixt the vowels, be theſe ſ.p m.c. whereof ſ. ſignifieth ſimple converſion (that is to ſay) that the vowell, which goeth next before this conſonant, is to bee ſimply conuerted, p. ſignifieth converſion per accidens, m. betokeneth tranſpoſition of the premiſſes, c. in the latter ende or midſt of the moode, betokeneth reduction by impoſſibilitie as in Baroco, and Bocardo.

Giue examples and ſhew how ſuch reduction is to be made.

Firſt as touching reduction by converſion, Cæſare is reduced into Celarent by ſimple converſion of the Maior: as this ſillogiſme in Cæſare.

Ce. No tree is a ſenſible body
ſa. But euery man is a ſenſible body: } which is reduced into Ce-
re Ergo no man is a tree. } larent thus.

Ce. No ſenſible body is a tree,
la. But euery man is a ſenſible body,
rent. Ergo no man is a tree.

And Cameſtres is reduced into Celarent by ſimple converting the Concluſion, and alſo by tranſpoſing the premiſſes, as this ſillogiſme in Cameſtres.

Ca. Euery man is a ſenſible body,
mes, But no tree is a ſenſible body: } which is reduced into Ce-
tres. Ergo no tree is a man. } larent thus,

Ce. No ſenſible body is a tree,
la. But euery man is a ſenſible body
rent Ergo no man is a tree.

Feſtino is reduced into Ferio, by ſimply converting the minor, as in this ſillogiſme in Feſtino.

Feſ. No ſtone is a ſenſible body,
ti. But ſome man is a ſenſible body: } which is reduced into
no. Ergo ſome man is not a ſtone. } Ferio thus

Fe. No ſenſible bodie is a ſtone,
ri. But ſome man is a ſenſible bodie:
o. Ergo ſome man is not a ſtone.

Darapti is reduced from Darii by converting the minor per accidens, as this ſillogiſme in Darapti.

Da. Euerie man is a ſubſtance.
rap. But euery man is a ſenſible body: } which is reduced in-
ti. Ergo ſome ſenſible body is a ſubſtance. } to Darii thus.

Da. Euery man is a ſubſtance,
ri But ſome ſenſible bodie is a man:
ti. Ergo ſome ſenſible body is a ſubſtance

Feriſon is reduced into Ferio, by ſimple conuerſion of the minor, as this Sillogiſme in Feriſon.

Fe. No man is a ſtone,
ri. But ſome man is a ſenſible body: } which is reduced into
ſon. Ergo ſome ſenſible body is not a ſton } Ferio thus.

Fe. No man is a ſtone,
ri. But ſome ſenſible body is a man:
ſon. Ergo ſome ſenſible body is not a ſtone

And ſo forth in all the reſt, according as the ſignificatiue Conſonantes do direct you.

Of Reduction by Impoſſibility. Chap. 13.

HOw is Reduction by impoſſibility made?

By ioyning the Contradictorie of the concluſion to one of the premiſſes, and to diſpoſe the ſame according to ſome one

sute of the perfect moodes of the first figure, in such sort as you may thereby make your conclusion contradictorie to the premisse which you left out, and was granted by your aduersarie, wherby your aduersarie is brought into an absurditie to confesse two Contradictories, to be true both at once.

Giue Examples?

As for example, if your aduersarie, would deny this Sillogisme in Baroco, euerie man is a sensible bodie: but some tree is not a sensible bodie, ergo some tree is not a man: then you may reduce it to the first moode of the first figure, which is Barbara, by making the Contradictorie of your Conclusion to bee the minor of your Sillogisme in this sort, euery man is a sensible body: but euery tree is a man, ergo euery tree is a sensible body, which argument he cannot deny, because he hath granted the minor to be true, for if this proposition, some tree is not a man, bee false, then this proposition, euery tree is a man, must needes bee true, for two Contradictories cannot be both true at once, & two true premisses must needes inferre a true Conclusion, and note that according to the diuersitie of the figures, the Contradictorie of the conclusion is diuersly disposed (that is to say) made eyther maior or minor accordingly, for in al the moodes of the second figure it must be made the minor, the former Maior being still reserued and in the third figure it must be the maior, the former minor being still reserued.

To which of the perfect moodes is euery vnperfect moode to bee reduced by impossibilitie?

To know this it shalbe needefull to learne, first the vse of certaine wordes compounded of diuerse sillables, and inuented by the Schoolemen for this purpose?

Which be those wordes?

The wordes be these contayned in this verse following, nesciebatis: odiebam: letare Romanis: whereof the first nesciebatis, contayning fiue sillables representeth the fiue vnperfect moodes of the first figure: odiebam hauing foure sillables betokeneth the fower vnperfect moodes of the second figure: letare Romanis, cõtayning six sillables, signifieth the six vnperfect moodes of the third figure: in all which wordes the foure vowels, a e i o do still retaine their olde significations before taught, seruing here chiefly to shew the quantitie and quality of euery conclusion, for euery vnperfect moode must be reduced to that perfect moode of the first figure, which hath such conclusion as ỹ vowel of the sillable representing ỹ vnperfect mood doth signifie: as for example in this word nesciebatis, here you see that in the sillable nes representing

the firſt vnperfect moode called before Baralipton the vowell e. ſignifying an vniuerſall negatiue, doth ſhew that this moode is to be reduced into Celarent, whoſe Concluſion is an vniuerſall negatiue, ſo as the order of the ſillables in the worde neſciebatis together with the ſignification of the vowels contayned in the ſaide ſillables, you may plainely perceiue that Baralipton is to be reduced into Celarent: Celantes into Darii, Dabitis into Celarent, Fapeſmo into Barbara, Friſelon into Darii. The like obſeruation and conſideration is to be had in the other wordes, repreſenting the reſt of the imperfecte moodes of the ſecond and thirde figure: for odiebam appointeth Ceſare to be reduced into Ferio, Cameſtres to Darii, Feſtino, to Celarent, Baroco to Barbara, againe letare Romanis appointeth Darapti to Celarent. Felapton to Barbara, Diſamis to Celarent, Datiſi to Ferio, Bocardo to Barbara, and Feriſon to Darii, whereof I gine you no examples, becauſe I would haue you to exercise your ſelfe in examining the former examples of the three figures, and to ſee how you can reduce each vnperfect moode, to his perfect moode by impoſſibilitie, according to theſe ſhort rules here ſet downe.

The Schoolemen after they haue taught the vſe of the moodes, and of reduction, do immediately treat of a ſillogiſm, made in oblique caſes, and alſo of the ſix habilities, and three defectes of a Sillogiſme: all which I willingly paſſe ouer with ſilence, as things more curious then profitable, for truely I know not wher to the ſillogiſme made in oblique Caſes, doo ſerue more then for varietie ſake.

Of Syllogiſmes made in Oblique Caſes, and of the ſix Habilities, and three defectes of a Sillogiſme.

Chap. 14.

WHat meane yee by oblique Caſes?

You learned in your accidents, that euery nourne hath ſix caſes (ỹ is to ſay) the nominatiue, the genetiue, the Datiue, the accuſatiue, the vocatiue, and the Ablatiue, whereof the nominatiue is onely right, and all the reſt are called oblique: as this is a Sillogiſm made in oblique caſes

ſes, euery drawing beaſt belongeth to man, or is the beaſt of man: but an oxe is a drawing beaſt, ergo an oxe belongeth to mā or is the beaſt of man, & as for the ſix habilities called ſex poteſtates Sillogiſmi, they are but meanes to proue the goodnes of one ſillogiſme by another, or to ſhew which is more vniuerſall, or comprehendeth more then another, or to conclude a truth of falſe premiſſes, which God wot is a ſeely kind of Concluſion, the beſt partes of which habilities are more eaſily learned by the rules & examples before giuen, then by thoſe that they ſet downe in their treatiſes touching the ſame. Likewiſe the three defectes are none other but Elenches or Fallaxes whereof there be thirteene kinds ſet downe by Ariſtotle himſelfe, whereof we ſhal ſpeake hereafter, in their place, ſo as they might ſay that there are thirteen defectes aſwell as three, and therefore leauing to trouble you with theſe thinges, I minde here to treate of a compounde Sillogiſme.

Of a Compound Syllogiſme, and of the diuers kindes thereof.

Chap. 15.

WHat is a compound Sillogiſme, and how many kindes thereof be there?

A compound Sillogiſme is that which is made of compound propoſitions, whereof as there be three ſorts, ſo they make three kindes of compound ſillogiſmes (that is to ſay) condicional, diſiunctiue, and copulatiue.

Of how many partes doth a compound ſillogiſme conſiſt?

Of three aſwel, as a ſimple ſillogiſme, that is of the Maior containing two ſimple propoſitions, and of the minor repeating the one part of the maior, and of the Concluſion, concluding the other part of the Maior, as in this example: if this woman hath had a childe ſhe hath laine with a man: but ſhee hath had a childe, ergo ſhee hath laine with a man.

How is the truth of a compound Sillogiſme to be found out?

By reducing the ſame into a ſimple Sillogiſme thus, euerie woman that hath had a childe hath laine with a man: but this woman hath had a child, ergo ſhee hath laine with a man.

Are there no other kindes of compound Sillogiſmes?

No, if you conſider the order of concluding, there bee but three kindes or waies (that is to ſay) condicionall, diſiunctiue, and copulatiue, but if you conſider the varietie in vttering ſuch Sillogiſmes, you may make ſeauen ſortes or wayes, whereof three appertaine to the condicionall, two to the diſiunctiue, and two to the copulatiue.

Which is the firſt way?

The firſt way is of the antecedent, which being granted the conſequent muſt needes follow, both affirmatiuely, and negatiuely: Affirmatiuely thus: if hee be godly, hee is bleſſed: hee is godlie, therefore bleſſed: negatiuely thus, if hee bee not godly, hee ſhall not bee bleſſed, but hee is not godly, ergo hee is not bleſſed.

What is the ſecond way?

The ſecond way is of the Conſequent, which fayling, the antecedent muſt alſo needes fayle, as thus, if he be wiſe, he is free, but he is not free, ergo not wiſe.

Which is the thirde way?

The thirde way, is when by granting the antecedent the conſequent fayleth as thus, if he be not wiſe he is wretched: but hee is wiſe, ergo not wretched.

Which is the fourth way?

The fourth way is when the former part of the maior propoſition diſiunctiue being put, the latter part is cleane taken away, as thus, he is eyther good or euill: but he is good ergo not euill.

Which is the fift way?

The fift way is when the former part of the diſiunctiue being taken away, the latter part muſt needes ſtande, as thus: hee is eyther good or euill: but hee is not good, ergo hee is euill, for all Syllogiſmes diſiunctiue are made for the moſt part of partes repugnant, whereof there can bee no more, but one true part.

Which is the ſixt way?

The ſixt way is by putting a Negatiue, before the coniunction copulatiue, ſo as it maketh the antecedent to ſtande, and taketh away the Conſequent, as thus, he is not both wiſe and wretched: but he is wiſe ergo not wretched.

Which is the ſeuenth way?

The ſeauenth way is when the negatiue is placed in like manner before the coniunction copulatiue, but yet ſo as the

Antecedent

Antecedent being taken away, the Consequent doeth stande as thus: He is not both wise and wretched, but he is not wise, Ergo wretched.

Of a consequent, and by what meanes and rules the goodnesse thereof is to be knowne.

Chap. 16.

But sith the goodnesse of an hipothetical sillogisme dependeth vpon the goodnesse of the consequent, it shall not be amisse to treate here of a consequent, and first to define what it is, & to shew how it is diuided.

What is a consequent?

A consequent is a speech consisting of such parts as doe follow one another, and are ioyned together with some rationall, (that is to say) an inferring or imploying coniunction, as Ergo, then, therefore, and such like.

How many partes are requisite in a Consequent?

Three, that is, the Antecedent, the Consequent, and the inferring signe or note, for of these three parts euery consequent consisteth.

How is it diuided?

Into two, that is, good and euill, againe the good is diuided into two, that is, formall and material.

When is it said to be formall?

when the Antecedent being true, the consequent doth necessarilie follow thereof, as when I say, This woman hath had a child, Ergo she hath laine with a man.

When is it said to be Materiall?

when the Consequent doth not of necessitie, but casually follow, the Antecedent being true, as Socrates walketh abroad, ergo it is faire weather.

Whereupon doeth the goodnesse of a Consequent chiefly depend?

It dependeth not so much of the truth of the Antecedent and of the Consequent, as of the necessary connexion, or knitting of thē together: and if the same be in forme of a Sillogisme, it requireth also the precepts of Moode and Figure before taught to bee obserued.

How els shall a man know whether a Consequent be good or not?

By examining the same with the Maxims or generall rules of the places: whereof some doe yeeld proofes or causes necessary, some probable, and some onely conjecturall.

What rules doe the schoolemen set downe to knowe a good Consequent.

They set downe some more, some lesse, but Cæsarius onely receyteth two, which are these: The first is, if a Consequent doeth necessarily follow of his Antecedent, then the contrary of the Antecedent must needes necessarily follow the contrary of the Consequent: As for example, because this is a good Consequent to say, it is a man, Ergo it is a sensible body: it is a good Consequent to say, it is no sensible body, Ergo it is no man: the reason thereof, is because the contrarie of the Consequent & the Antecedent cannot be both true together, but one of them must needs be false. The second rule is, that whatsoeuer followeth vpon a good Consequent must needes also follow vpon the Antecedent thereof: As for example, if it be a good Consequent to say, it is a man Ergo it is a sensible body, ye may aswel say, if it be a sensible body, Ergo it is a substance: & sith ẏ a sensible body is a substance, you may therefore aswell conclude that man is a substance. To these rules you may adde also the third, which is, that of true thinges nothing can follow but truth: but of false things, sometime that which is false, and sometime that which is true, as hath beene said before: and yet such truth followeth not by vertue of the false premises, but because the conclusion or Consequent is a true proposition of it selfe: As in this example, Euery sensible body is a tree, but euery Peare tree is a sensible body, Ergo euery Peare tree is a tree.

Of a Sillogisme Demonstratiue.

Chap. 17.

HItherto we haue treated of a Sillogisme according to the first three of the foure diuisions thereof, before mentioned: for if ye remember wel, we said that according to ẏ first diuision, a Sillogisme is eyther Categoricall or Hipotheticall, according to the second diuision eyther common or expositorie, according to the third diuision eyther perfect or vnperfect, and according to the fourth diuision, either demonstratiue, dialectical,

or

or ſophiſticall, whereof we come now to ſpeake, & firſt of a Sillogiſme demonſtratiue:

What is a Sillogiſme demonſtratiue?

A Sillogiſme demonſtratiue is ỹ which is made of neceſſary, immediate, true, certaine, and infallible propoſitions, being firſt and ſo knowne, as they neede none other proofe.

What meane ye by neceſſary and immediate Propoſitions?

Neceſſary propoſitions be thoſe which cannot be otherwiſe, as thoſe which do conſiſt of the generall kind, of the ſpeciall kind, of the difference, or of the propertie, as hath beene ſaide before: and therefore Ariſtotle maketh a difference betwixt a demonſtratiue & a dialecticall propoſition, for a demonſtratiue propoſition conſiſting of matter naturall is neceſſarily true, and cannot bee otherwiſe, but a dialecticall propoſition, conſiſting of matter contingent, or caſuall, is onely probable, and may be otherwiſe.

What be immediate propoſitions?

Immediate propoſitions are thoſe which are firſt, and haue none before them, whereby they can be proued: as euery ſenſible body endued with reaſon is apt to learne. Ariſtotle alſo ſetteth downe three properties or conditions belonging to the ſubiect & predicate of a demonſtratiue propoſition.

Which be thoſe properties?

Theſe, to be ſpoken of all, by it ſelfe, and vniuerſally.

What is to be ſpoken of all?

It is when the Predicate is knowne to bee altogether and alwaies in the ſubiect, eyther as a part of the ſubſtance thereof, as when it is a generall kind, the ſpeciall kind, the difference, or the propertie, as ſome inſeparable accident alwaies incident to the ſaid ſubiect, as when I ſay: Euery man is a ſenſible body: or euery man is endued with reaſon: or euery man is apt to ſpeake: or euery Swanne is white: or euery fire is hot.

What is to be ſpoken by it ſelfe?

That is when the predicate is either the definitiõ of the ſubiect, as a man is a ſenſible body endued wᵗʰ reaſon: or els ſome part of ỹ definition, as man is a ſenſible body, or man is endued wᵗʰ reaſon.

What is to be ſpoken vniuerſally?

It is when the predicate is in the ſubiect, and in euery ſuch ſubiect by it ſelfe, and firſt, as when I ſay, a man is a ſenſible bodie endued with reaſon: here this predicate ſenſible body endued with reaſon is not onely ſpoken of man, but of euery man in generall by it ſelfe, and firſt: for if ye ſhould ſay, Peter or Socrates is a ſenſible body endued wᵗʰ reaſon: here the Predicate is not ſpokẽ of any of theſe, as firſt, but in the ſecond place, becauſe they are

comprehended vnder the word man. For generall kinds are said to be before speciall kindes, and speciall kindes before Individuums as hath beene said before.

How doth Aristotle define Demonstration?

In this sort: Demonstration is a Sillogisme made of such propositions as are true: first immediat, and manifestly knowne, and be the causes of the conclusion: first and immediat here is all one, signifying such propositions as need not to bee proued or made more euident by any other former Propositions. Againe the premises must be more knowne then the conclusion, for otherwise it should neyther be demonstration nor yet good sillogisme. Finally the Premises must render the very cause of the conclusion: and therefore Aristotle in another place saith, that demonstration is a Sillogisme causing knowledge and science.

What is science?

It is a firme and assured knowledge of any thing.

What is to know?

We are said to know a thing, when wee know the true causes thereof, and that it cannot be otherwise: for to make a perfect demonstration we must not onely shew that there is such a thing as we go about to proue, but also we must shew the cause why it is so: for (as Aristotle saith) euery discipline and doctrine intellectiue dependeth vppon a former knowledge which is twofolde, whereof the one is to know that the principles (that is to say) the premises of the demonstration be true, and the other is to know the true signification of the subiect and predicate of the question: for vnlesse a man knowe what the name of the subiect signifieth, whereof the question riseth, and also the proper qualities of the same, how shall he bee able to iudge whether the proofe which is brought in to proue the question withall be to the purpose or not. Againe vnlesse he know the premises to be true, the demonstration shall breede no certaine knowledge in him.

Giue example of a Sillogisme demonstratiue?

Let this be your example: Euery sensible body endued with reason is apt to learne, but euery man is a sensible body endued with reason: Ergo euery man is apt to learne. Here you see that in this Sillogisme the premises being true and first, doe render the cause of the conclusion: and therby do imply a most true consequent: for who so would go about to demonstrate any of the premises by some other former, or more knowne Propositions, should loose his labour, syth there is none before them more certaine nor more knowne to proue this conclusion withall then they: for to vnderstand the truth of these premises, it sufficeth one-

ly

ly to know the ſignification of the tearmes, and to haue ſome experience of the thing called man: and therefore this kinde of demonſtration is called of the ſchoolemen Sillogiſmus ſcientificus, becauſe it yeeldeth the perfect knowledge and ſcience of the thing in queſtion.

Of the certainty of mans knowledge.

Chap. 18.

WHereof dependeth the certainety of mans knowledge?

Of three things, that is, of vniuerſall experience, of principles, & of naturall knowledge that a man hath in iudging of Conſequents: for theſe be three infallible rules of certitude or truth in all kinds of doctrine.

What is vniuerſall experience?

Vniuerſall experience is the common iudgement of men in ſuch things as are to be perceyued and knowne by the outwarde ſences: as fyre to be hot, the heauens to turne round about, wine and pepper to be hot in operation, women to bring forth children and not men: which things all men (vnleſſe they be mad and out of their wittes) muſt needs confeſſe to be true.

What be principles?

Principles be certaine generall conceptions & naturall knowledges grafted in mans minde of God, to the intent that by the helpe thereof he might inuent ſuch artes as are neceſſarie in this life for mans behoofe, for by the naturall knowledge of the mind we vnderſtand, number, order, proportion, and all other neceſſary artes and ſciences.

How doth Ariſtotle define principles?

In this manner: principles be true propoſitions hauing credite of themſelues, and need no other proofe.

How many diuiſions do the ſchoolemen make principles?

Diuerſe.

Rehearſe thoſe Diuiſions?

The firſt is, of principles ſome bee called ſpeculatiue and ſome practiue: The ſpeculatiue be thoſe naturall knowledges or propoſitions whereof naturall philoſophie or the Mathematicall ſciences be grounded, as theſe: The whole is more then his part: Thoſe things which are equal to a third, are equal among themſelues,

ſciues: of one ſimple body there is but one naturall mouing, and ſuch like. The principles practiue, be thoſe natural knowledges, whereby mens manners are gouerned: for by this naturall light we know the difference betwixt good and euill: As for example: theſe be principles practiue: God is to be honored and obeyed: Iuſtice is to be embraced: ciuell ſocietie is to be maintained and the diſturbers thereof to be puniſhed: theſe & ſuch like propoſitions are naturally receiued of all men as infallible verities. Again of principles ſome be called generall and ſome proper. The generall be thoſe that may be applyed to many ſciences, as theſe: the whole is more then any of his parts, if equall bee taken from equall, equall doe remaine and ſuch like. The proper principles be thoſe that are properly belonging to ſome one certaine ſcience, as a line to be a length without breadth, is a principle of Geometrie: Againe this propoſition, euery thing is, or is not, is a principle of Logicke, and to be ſhort, euery ſcience hath his proper principles. Of which ſome be called dignities or Maxims, and ſome poſitions.

Wherefore are they called dignities or Maxims?

For that they are worthy to be credited for their ſelfe ſake, for ſo ſoone as we heare them in ſuch ſpeech as wee vnderſtand, wee naturally know them to be true without any further proofe, as theſe. Take equal from equal, and equall wil remain: the whole is more then any of his partes, &c.

What be Poſitions?

Poſitions be thoſe principles which although they neede no other proofe, yet they be not ſo eaſily vnderſtoode of all men at the firſt vttering as maxims be: for in theſe beſides the knowledge of the tearmes it is needfull to haue alſo ſome experience, as in theſe principles, Euery thing that is compounded of matter and forme is moueable: whatſoeuer is heauie tendeth naturally downeward, and whatſoeuer is light tendeth vpward. Againe of Poſitions, ſome are called Definitions, and ſome Suppoſitions, and of ſuppoſitions ſome are called Petitions, called in Latine Poſtulata, and ſome Suppoſitions aſſumpted.

Define theſe kinds?

1 Definition ſheweth what the thing is.

2 Suppoſition is that which ſuppoſeth a thing to be, or not to be, as the Geometricians doe ſuppoſe that there is Punctum: (that is to ſay) a pricke or a thing indiuiſible, hauing neyther length, breadth, nor depth.

3 Petition is a Propoſition aſked and granted to be true: as this is a petition in Geometrie, that a man may drawe a right line

line from one point to another.

4. Supposition assumpted is when a manifest supposition is assumpted to proue another thing withall, as to proue that Demonstration consisteth of true propositions, the disputer will assumpt this assertion, which sayth, that of false thinges there is no certaine knowledge: and that truth is not knowne but of true things.

What is the third thing whereof the certainety of mans knowledge dependeth?

It is the knowledge that man hath in iudging of consequents, which is not altogether artificiall, but partly naturall, for God thought it not sufficient for mans behoofe to know simple propositions as principles or common conceptions gotten by experience, vnlesse hee could also compare them together, and ioyne thinges like: and agreeable together, and seuer things vnlike, and disagreeing one from another, and by such comparison and composition to finde out thinges before not knowne, and to the intent we should not erre or wander out of the right way, God hath shewed vs an order, and prescribed certaine boundes and limites of necessitie to bee obserued in such composition, which boundes are Sillogismes rightly made: for so doe the Consequentes plainely appeare: And because that proportions are knowne by nature, it shall not be amisse to giue you an example in numbers: for three knowne numbers being placed in true order of a Sillogisme, a fourth number vnknowne of necessitie doeth follow, as in this question: If one pounde of ware bee worth a groate, what is tenne pounde of ware worth? Marry ten groates: which is prooued by a Sillogisme in this manner: Euery pounde of ware is worth a groate, but here is ten pound of ware, Ergo they are worth tenne groates: and like as in these kindes of Sillogismes Arithmeticall, the proportion which is to be iudged by mans naturall knowledge doth shew the consequent to be infallible, euen so the Consequentes in other Sillogismes are shewed to be infallible by such demonstrations as are not farre fetched or doubtfull, but are manifest, plaine and euident.

Of the two kinds of Demonstration.

Chap. 19.

HOw do the schoolemen deuide demonstration.

Into two, that is perfect & vnperfect: and they call the perfect, demonstratio propter quid: and the vnperfect, demonstratio quia est.

It is perfect when it proceedeth from the proper cause to the effect, called of the schoolemen a priore, for in that demonstration the Antecedent contayneth the proper and true cause of the consequent, as when we say, the sunne is vp, Ergo it is day.

What is to be obserued in a perfect demonstration?

That the predicate of the conclusion, which is also predicate in the Maior be first, properly, alwaies, and that really and accidentally, incident to the subiect of the Maior, and to euery thing contained vnder the same, which subiect must be some generall kind, and the very meane or proofe of your conclusion: As for example, if you would proue a cocke to be a feathered fowle, it were not a sufficient demonstration to say, that euery flying beast is a feathered fowle, for some beastes fly that haue no feathers, as Backes that flie in the night season. But if you say that euery birde is a feathered fowle, and euery Cocke is a birde, ergo euery Cocke is a feathered fowle: you shall make a perfect demonstration, because the subiect and predicate of the Maior haue such conditions as are before required, for this Maior sheweth the thing to bee, and also wherefore it is, which is done so often as the predicate is the true definition of the subiect, as when I say: Euery man is a sensible body endued with reason, or els some chiefe parte of the definition, as whē I say, Euery man is endued with reason, as hath beene said before: for euery good demonstration is either made of a true definition, or taken from the generall kind, speciall kind, or els from the speciall difference, or property, yea and sometime they may be taken out of the whole and of the partes, of the proper causes and effects, of perpetual adiacents, otherwise called common accidents, of proper acts, of contrarieties, and of diuine authoritie, whereof you haue had examples before in the treatise of places and seates of arguments.

VVhen is it said to be an vnperfect demonstration?

when the premises are true, implying a true consequent, but yet

ter are not first, neyther doe they shewe the originall cause of the conclusion, as in this example: Euery sensible body is nourishable, but euery man is a sensible body, Ergo euery man is nourishable: here though the premises be true propositions, yet they be not first, neyther doe they shew the originall cause of the conclusion: for the Maior of this Sillogisme may be proued by a former and more knowne proposition, for that which is more generall is more knowne then that which is lesse generall, as thus: Euery liuing body is nourishable, but euery sensible body is a liuing body, ergo euery sensible body is nourishable. Againe it is said to bee vnperfect when wee proceede from the effect to the cause, as when we say, it is day, Ergo the Sunne is vp. But that demonstration which proceedeth from the cause to ỹ effect is the more worthier, because we vse therein discourse of reason and vnderstanding: and in the other we onely iudge by the outward senses, whereof springeth two principall kindes of methode, (that is to say) compendious and short orders or wayes of teaching in all manner of sciences, whereof the one is called composition proceeding forwarde from the first to the last, and the other is called resolution, proceeding backeward from the last to the first, as hath beene said before in the Chapter of Methode. Lib. 2. Chap. 5.

Of science, opinion, ignorance, wit, and of the fower scientiall questions.

Chap. 20.

WHat other things are wont to be treated of by the schoolemen in demonstration?

Diuerse things, as what difference is betwixt science and opinion: also they treat of the diuerse kinds of ignorance, of prompt witte: and of the foure scientiall questions.

What difference is betwixt science and opinion?

Science as hath beene said before, is that which consisteth of necessary, certaine, and infallible propositions, and of such thinges as cannot be otherwise. Opinion is the knowledge of thinges casuall, which may be sometime false and sometime true.

How many kindes of ignorance do the Schoolemen make?

Two: that is to say, absolute, which of the schoolemen is called Ignorantia negationis, & ignorance by false conception, which they call Ignorantia affectionis. The first is, when we vtterly deny to haue any knowledge of a thing at all: The other is, when wee thinke to know that which we know not, being deceiued by some false perswasion, whereunto we are affected, wherof it is called Ignorantia affectionis.

How doeth Aristotle define prompt witte, called of the Latines Solertia?

He defineth it to bee a promptnesse or readinesse in quickely finding out the proofe or cause of any thing that is in question without any studie.

Which be the foure scientiall questions?

These, whether the thing be, what it is, how it is, and wherefore it is: wherof the first enquireth of the subiect whether it bee: the second of the predicate, as what it is: the third how it is, (that is to say) how the predicate is spoken of the subiect: And the fourth asketh the cause why it is spoken of the subiect. And thus much of a Sillogisme demonstratiue, now of a Sillogisme Dialectical or probable.

Of a Sillogisme Dialecticall.

Chap. 21.

WHat is a Dialecticall Sillogisme?

A Dialecticall Sillogisme is that which is made of probable and credible propositions.

What things are said to be probable?

Things probable according to Aristotle, are these that seeme true to all men, or to the most part of men, or to all wise men, or to the most parte of wise men, or els to the most approued wise men: whereby it appeareth that things probable may be said fiue manner of waies.

Shew how.

First those thinges are probable, which vnto all men aswell learned as vnlearned being in their right wittes do seeme to bee true, as these: Euery mother loueth her child: we loue them that loue vs: we must do good to them ẏ do good to vs. Secondly those things ẏ seeme true to most men, as these: it is better for a cõmunalty

laitie to be ruled by one Prince then by many: It is not good to serue many Maisters at once. Thirdly, those thinges that seeme true to all wise men, as these: What thing soeuer is honest, the same is also profitable: Vertue is better then riches. Fourthly those that seeme true to the most part of the wise and learned, as thus: the soule of man is immortall: the Sunne is greater then the earth. Fiftly those thinges that seeme true to the most approued wise men, as these. The worlde had a beginning: it is better for a prince to bee loued then feared of his subiects. And generally vnder things probable are contained all true propositions that be casuall, and not implying any necessitie. I say here true propositions to exclude false propositions, whereof sophisticall Sillogismes are made, and not those which we cal probable or logicall Sillogismes, and yet such propositions bee not so true in deede, as those that be required in a Sillogisme demonstratiue, but onely do seeme true engendring a certaine opinion in mans mind, doubting notwithstanding the contrarie: for it breedeth not a perfect knowledge as science doth, whereby the mind is of all doubtes throughly resolued. And note herethat the schoolemen do make the matter (wherof a Dialecticall Sillogisme doth consist) to be twofold, that is, Materia remota, in English farre of: and Materia propinqua (that is to say) nigh or neere at hand.

What doth Materia remota containe?

These fower Dialecticall Predicates, (that is) Definition, called of the Schoolemen Terminus, property, generall kind, and Accident: All which predicates are before defined, and are called predicates, because they are common wordes spoken of others. But truely I see no cause why these foure Predicates should bee attributed to a dialecticall Sillogisme, more then to a Sillogisme demonstratiue: for sure I am, that as good demonstrations may be made of these as of any other Predicates.

What is contained vnder Materia propinqua?

These: a dialecticall Proposition, Probleme, and Position.

What difference is betwixt these three wordes, dialecticall proposition, Probleme, and Position.

A Dialectiall proposition is a probable question vttered with a simple Interrogatorie, as whether the mother loueth her childe? which is no question in deede, but to him that asketh.

A Probleme is a doubtfull question vttered with a double Interrogatorie, as whether the least fixed starre in the firmament be greater then the Moone or not? or whether that the Sunne bee

bigger then the earth or not. Position is a wonderfull opinion maintained by some excellent Clearke, as to say, that all thinges are but one essence or being, as Melissus affirmed, or that all things do continually flowe and change as Heraclitus helde, or that the earth moueth and not the heauens, as Copernicus supposeth, onely to find out thereby the true motions of the planets, and not for that he thought so in deede.

Of a sophisticall Sillogisme.

Chap. 22.

WHat is a sophisticall or false Sillogisme?

A false Sillogisme is ỳ which is either made of false Propositions, or els of such as seeme probable, and be not in deede, or els of probable premisses not rightly concluding, and of such Sillogismes there be three sorts, the one fayling in matter, the other in forme, the third in both.

When is it said to faile in matter?

It faileth in matter when the Sillogisme hauing true forme is made of such Propositions as seeme probable, and bee not probable in deede, as thus: no oppolites are both true at once, but subcontraies are oppolites, Ergo they are not true. Here though this Maior seemeth probable, because many oppolites as contraries, and contradictories be neuer both true at once, yet it is not probable in deede: for those oppolites which be called subcontrary and subalternate may be both true at once as hath beene before.

When is it said to faile in forme?

It fayleth in forme when it is made of probable premises not rightly concluding: because they be not orderly disposed according to moode and Figure, as thus: Some oppolites are both true at once, but Contradictories are oppolites, Ergo Contradictories are both true at once. Here the premises be probable, but the sillogisme halteth in forme, because that of meere particulars no good conclusion can follow.

When is it said to fayle both in matter and forme?

It fayleth both in matter and forme, when the premises are neither probable nor yet doe conclude rightly according to the rules of Logicke, as thus: No oppolites are both true at once, but subcontraries are oppolites, Ergo no subcontraries are both true at

once

nce. Here first it faileth in matter, because the Maior (as hath beene said before) is not probable in deede. Againe it sayleth in forme, because that contrarie to the rules of a Sillogisme a vniuersall conclusion is implyed, one of the premises being particular which should not be.

Is there no other kinds of false Sillogismes?

Yes, there is another kind of false Sillogisme called of Aristotle Sillogismus falsigraphus, which proceedeth of the proper principles of some discipline, misconstrued or not rightly vnderstood, as thus: All lines drawne from one selfe point to another self point, bee equall, a right line, and a crooked line bee drawne from one selfe point to another selfe point, Ergo a right line and a crooked line be equall, as you see in the figure a. b. in the margent: here the Maior being a principle in Geometrie is not rightly vnderstoode, for the right meaning of the principle is that the lines should be also drawne in one selfe space, and then they must needs be equall (that is to say) all of one length: but as touching false Sillogismes we shal treate of them hereafter more at large in the Elenches: in the meane time wee mind to speake of the other kinds of argumcnts before mentioned, and first of Induction.

a b

Of Induction.

Chap. 23.

WHat is Induction?

Induction is a kind of argument wherein wee proceede from many particulars to a vniuersal conclusion, comprehending all the said particulars: and by the particulars here I meane not onely singularities, called in Latine Individua, but also such things as be lesse common then ỹ vniuersall which is concluded, as when wee proceede from many speciall kinds to some generall kinde comprehending the same, or from thinges lesse common to more common.

What is to be obserued in this kind of reasoning?

That the particulars be all of like nature, for if there bee any one contrary or vnlike to the rest, then the induction is not good.

How manifold is Induction?

Twofold: perfect, and vnperfect: it is called perfect when all the singularities are rehearsed: and vnperfect when but some certaine partes are onely recyted.

Giue example of Induction?

Of an Induction, proceeding from meere singularities vnto vniuersall, let this be your example: Malmesie is hot, Gascon wine is hot, Romney wine is hotte, Sacke is hot, Renish wine is hot, French wine is hotte, & sic de singulis: Ergo euery wine is hotte: which may be brought into a Sillogisme thus: Euery thing that is wine be it eyther of Greece, Spaine, Italy, Germany, Fraunce, or of any other country is hot, but euery wine is one of these, Ergo euery wine is hot.

Giue example of an Induction proceeding from the speciall kindes to their generall kinds?

Of an Induction proceeding from the speciall kindes to the generall kind, let this be your example: Euery man hath mouing, euery horse hath mouing, euery Oxe hath mouing, & sic de singulis: Ergo euery sensible body hath mouing. In which example you see that to euery speciall kinde is added a vniuersall signe to make your Induction good, which would not bee so, if you should vse a particular signe, in saying, some man, some horse, some Oxe, and so forth.

Which of these two kindes of reasoning, eyther an Induction or a Sillogisme is most familiar and easie to man?

Induction is more familiar to man then a Sillogisme, for ỹ sillogisme proceedeth from vniuersalities vnto particularities, which vniuersalites be more knowne to nature, (that is to say) to the discourse of reason, and lesse knowne to our outwarde sences. But Induction proceedeth from particularities vnto vniuersalities, which particularities are more knowne vnto vs, (that is to say) to our outward sences, and lesse knowne to nature. Againe by Induction wee are able to proue the principles of demonstration, which are not otherwise to be proued, as this principle: Euery whole is more then his part, may be proued by Induction in this sort: This whole is more then his part, and that whole is more then his part, neither is there to be found any whole, but that is more then his part: Ergo euery whole is more then his part. Also this principle, Euery sensible body endued with reason is apt to learne, may be proued thus: this man is apt to learne: and that man is apt to learne, and so of the rest, ergo euery sensible body endued with reason is apt to learne.

Of

Of an Enthimeme. Chap. 24.

WHat is an Enthimeme?

An Enthimeme is an vnperfect Sillogisme made for haste or speed of two propositions onely, (that is of one of the premises called in this kind of argument the Antecedent, and of the conclusion called here the Consequent, for the other of the premises being supposed to be true and well knowne, is left out of purpose as a thing superfluous and not needeful to be recyted, and sometime the Maior is left out as thus: Voluptuousnesse is not perpetuall nor proper, it is not therefore the chiefe felicitie: & sometime the Minor is left out, as here, euery good thing maketh his possessor the better, therefore voluptuousnesse is not good.

How shall a man knowe when the Maior or Minor is left out?

It is easie to know which of the premises is left out by this meanes, for if the subiect of the Antecedent and of the Consequent be all one, then the Maior is left out, but if they be not allone but diuers, then the Minor is left out, as you may see in the two last examples, and the part lacking being reduced together with the rest into a Sillogisme, will quickly shew the truth or falshood of the argument.

From whence are such kinds of arguments gathered?

They are gathered for the most part from signes, which if they be necessary, then the Enthimeme also is necessary, as thus: The woman giueth milke, ergo she hath had a child, or is with childe: if the signes be probable, then the Enthimeme is also probable, as thus: This man is a night gadder, ergo he is a thiefe.

Of an Example.

Chap. 25.

WHat is an example?

An Example is a kinde of argument, wherein wee proceed from one particular to proue another particular, by reason of some likenesse that is betwixt them, as thus: God did not punish the Niniuites because they repented, ergo he will not punish vs if wee repent. God did not let to plague king Dauid for adulterie, ergo he will not let to plague any other king for committing the same offence.

Wherein differeth this kind of argument from the reſt?

This kind of argument differeth in forme from all the reſt before taught, for a Sillogiſme proceedeth from the generall kinde to the ſpeciall kind or otherwiſe. An enthimeme imitating a Sillogiſme reciteth in his antecedent the cauſe of the concluſion. Againe an Induction out of many particularities gathereth a vniuerſalitie, none of which things is to be found in an example proceeding onely from one particular to another like particular. Notwithſtanding Ariſtotle ſaith, that it may be reduced partly to an Induction, and partly to a Sillogiſme: for in taking the firſt particular you may by an vnperfect Induction imply an vniuerſall propoſition. And ſo from that vniuerſall propoſition to proceede by order of Sillogiſme vnto the other particular implied in the concluſion of the example, as in this example: Iudas died euill, Ergo Pylate alſo dyed euill: it may be firſt reduced into an vnperfect Induction thus: Iudas died euill becauſe hee was the author of Chriſtes death, and did not repent, Ergo euery man that was author of Chriſtes death and did not repent dyed euill. Into a Sillogiſme thus: Euery man that was author of Chriſtes death and did not repent dyed euill, but Pilate was author of Chriſtes death, and did not repent, Ergo Pilate died euill.

Whereto ſerues this kind of reaſoning by example?

Examples are very good in all morall matters to perſwade or diſſwade.

What is to be obſerued in reaſoning by way of example?

You muſt in any wiſe bee ſure that the ſimilitude or likeneſſe of the particulars doe make to the purpoſe which you intende, & that it be the very cauſe why the predicate of ỹ Antecedent properly belongeth vnto the ſubiect, for otherwiſe the argument is not good: for if you ſhould reaſon thus: Iudas dyed euil, ergo Peter dyed euill: becauſe they were both ſinners: for their likeneſſe in this behalfe is not the cauſe that Iudas dyed euill, but the cauſe before alleadged.

From whence is this kind of argument fetched?

From the places of compariſon, as from the like, from the more, and from the leſſe, of all which the generall rule or Maxim is thus: In thinges like is like iudgement or reaſon, as hath beene ſaid before in the treatiſe of places. Thus farre of the foure principall kindes of reaſoning, now of the reſt and firſt.

Of

Of the Argument called Sorites.

Chap. 26.

WHat is Sorites?

Sorites is a kinde of argument proceeding as it were by certaine degrees vnto the Conclusion, which is gathered of many propositions necessarily following one another, and are knit together, so as the Predicate of the first proposition, is the subiect of the second, and the predicate of the second the subiect of the thirde, and so forth euen to the last proposition, whose predicate being ioyned to the subiect of the first proposition, doth make the Conclusion as thus: The soule of man doth moone it selfe: whatsoeuer moueth it selfe is the beginning of moouing: the beginning of meoning hath no end, whatsoeuer hath no end is immortall, ergo the soule of man is immortall.

When is this kinde of argument said to be of force?

When it is made of affirmative propositions, wherein wordes of affinitie are necessarily ioyned together, as when kindes generall, differences, or properties, are ioined with those special kinds of whome they are spoken, or when proper effectes are ioyned with their proper causes, for if the propositions be eyther negatiue, or do not necessarily hang together, then it is no good argument, as in negatiues let this be your example: A man is not a Lyon, a Lyon is a sensible beast, ergo man is not a sensible beast. Now of propositions not hanging necessarily together, because that proper effectes are not ioyned with their proper causes, let this common iest be your example.

Who so drinketh well, sleepeth well,
Who so sleepeth well sinneth not,
Who so sinneth not shalbe blessed,
Ergo who so drinketh well, shalbe blessed.

which is no good conclusion, for much drinke is not alwaies the cause of sleepe, nor sleeping the cause of not sinning.

The

The Rhetoricians vse another kinde of argument, called Gradatio, which is much like to Sorites, sauing that the subiect of the first proposition is not rehearsed in the Conclusion, for they vse it rather as an ornament of speech, then as a proofe, as the vertue of Scipio wanne him fame, fame got him enemies, and his enemies procured his death.

Of diuers other kindes of argumentes, and first of a Dilemma, and what kindes it comprehendeth.

Chap. 27.

THere be also other formes of argumentes, whereof some be Fallaxes, and some are good conclusions, and they be these, Dilemma, Enumeratio, simplex Conclusio, Subiectio, Oppositio, Violatio.

What is Dilemma?

Dilemma is an argument made of two members, repugnant one to another, whereof whichsoeuer thou grantest, thou art by and by taken, as thus, it is not good to marrie a wife, for if she be fayre shee will be common, if fowle then loathsome: notwithstanding, this is but a slipperie kind of argument, vnlesse both the repugnant partes be such, as neyther of them can bee turned again vpon the maker of the argument, for then by conuersion, the Dilemma, is soon confuted, as for example, you may conuert both partes of the argument last recited thus: it is good to marrie a wife, for if she be fayre, she shall not be loathsome, if fowle then not common, much like to this is that captious argument, which Protagoras the lawyer made against his scholler Euathlus, who had couenanted to pay his maister a certaine summe of money at the first suite or action that hee should winne by pleading at the law, whereupon his maister did afterwards commence an action against him, and in reasoning with him of the matter made him this Dilemma: eyther (saieth hee) iudgement shalbe giuen against thee, or with thee, if against thee, then thou must pay mee by vertue of the iudgement, if iudgement be giuen with thee, then thou must also pay mee by couenant, which the scholler immediately

all be confuted by conuersion in this sort, eyther sayeth hee iudgement shalbe giuen with mee, or against me, if with me then I shalbe quit by law if against mee, then I ought to pay nothing by couenaunt.

What other intricate kindes of reasoning are said to bee comprehended vnder Dilemma?

Diuerse, whereof some be called Ceratins or horned arguments, some Crocodolites, some Assistatons, some Pseudomenons.

Define all these kindes, and giue examples?

1 The horned argument is when by some subtile and craftie maner of questioning, wee seeke to haue such an answere as we may take vantage thereof, as the Pharises did when they questioned with Christ touching the payment of tribute to Cesar.

2 The Crocodolite is when being deceiued by some crafty manner of questioning, we do admit that which our aduersarie turneth again vpon vs to our own hinderance, as in the fable of ye Crocodile, whereof this name Crocodolite proceedeth, for it is said that the Crocodile hauing taken away a childe from his mother, reasoned with her in this sort: I will deliuer thee thy child againe, if thou wilt say a troth, whether therefore shall I deliuer him or not, the mother answered, thou shalt not deliuer him, and therefore of right thou oughtest no deliuer him, no sayeth he, I will not deliuer him, to the entent it may seeme that thou hast said troth, and though thou haddest saide that I shoulde deliuer him, yet I woulde not deliuer him in deede, for making thee a lyer.

3 Assistaton is a kinde of caueling not consisting of any sure ground, as if a man did say, that hee doth hold his peace, or lyeth, or knoweth nothing, another by and by might taunt thereof in this sort, ergo hee that holdeth his peace speaketh, hee that lyeth sayeth truth, hee that knoweth nothing knoweth something.

4 Pseudomenon is a false or lying kinde of caueling as thus: the heauens couereth all thinges, ergo it couereth it selfe, Epimenedes, being a Candiot himselfe saide, that the Candiotes were lyers, the question is whether he saide true or not, for though he saide true, and that the Candiotes were lyers, yet it is false, because a Candiote said it: againe if the Candiotes bee no lyers, nor Epimenides is a lyer, then he is to be beleeued.

How are the Fallaxes of these captious argumentes to bee founde out?

The Fallaxes of all these kindes of captious argumentes are soone found out, if we consider well the rules before taught touching the repugnances of propositions, as whether there bee any

ambiguitie in the termes, and whether the selfe same termes in the repugnant partes haue respect to one selfe thing, time, or place or not, it is good also to consider the substance, quantitie, and qualitie of the propositions: for in the last example this saying Candiotes be lyers, is a proposition indefinite, and therefore is not of such force as to say, all Candiotes be lyers, which is an vniuersall proposition, for of particular premisses nothing rightly followeth: In the other examples you shall finde that there is some doubtfulnes in the termes hauing respect either to diuers thinges, to diuers times, or diuers places, as to say, he holdeth his peace when hee speaketh: Here is doubtfulnes in the termes hauing respect to diuers thinges, that is to say aswell to those thinges, which he meaneth to keepe in silence, as to those wordes which he vttereth by mouth, so in this word suite in the example of Protagoras was doubtfulnes, for that Protagoras ment some other suite, and not that which he himselfe commenced.

Of Enumeration.

Chap. 28.

WHat is Enumeration?

Enumeration is a kinde of argument, wherein many thinges being reckned vp and denyed, one thing onely of necessitie remaineth to be affirmed, as thus: Sith thou hast this horse, either thou didst buy him, or he came to thee by inheritance, or he was geuen thee, or bred at home with thee, or els thou didst take him from thine enemie in time of war, or if none of these were, then thou must needes steale him: but thou neither boughtst him, nor hee fell not vnto thee by inheritance, nor was geuen thee, nor bred vp at home with thee, nor yet taken by thee from the enemie, it followeth therefore of necessitie that thou hast stolne him.

When is this kinde of argument to be confuted?

When your aduersarie can proue any necessarie part to be left out.

Of a simple Conclusion Chap. 29.

WHat is a simple Conclusion?

A simple Conclusion is no other thing, but a necessarie

sarie Enthymeme, in the which the Consequent doth nerssarilie follow the antecedent, as thus, shee hath had a childe, ergo shee hath layne with a man.

Of Subiection.
Chap. 30.

WHat is Subiection?

Subiection is a questioning kinde of argument, in the which wee confute each question with a reason immediately following the same, as thus: how is this fellow become so wel monied, had he any great patrimonye left him? no: for al his Fathers landes were solde, came there any inheritance to him by discent any otherwise? no, for hee was disinherited of al men, came there any goodes vnto him by Executorshippe &c. if then hee hath not beene enriched by any of these honest wayes, eyther hee hath a golden myne at home, or else he is come to these riches by some vnlawful meanes. This argument fayleth when any principall part is left out, and therefore differeth not much from Enumeration before recited.

Of Opposition.
Chap. 31.

WHat is Opposition?

Opposition is a kind of Argument made of Repugnant partes, wherein we reuert from the oppolit of the first proposition, vnto the same proposition againe, as thus: if I were in the citie at such time, as this man was slaine in the countrie, then I slew him not, this proposition is now a simple conclusion, and may be made an Opposition in this manner, if I had been in the countrie at such time as you say this man was slaine, then you might well suspect mee to haue slaine him: but sith I was not there at that time, there is no cause therefore why yee shoulde suspect mee.

Of Violation.

Chap. 32.

VVHat is Violation?

Violation is a kinde of Concluding, more meete to confute then to proue, whereby we shew the reason of our aduersary, to make for vs, and not for him, as thus: it is not good to marie a wife, because that of marriage many times commeth the losse of children to our great sorrow, yea rather it is good therefore to marie a wife to get other children for our comfort. Thus much touching the diuerse kindes of reasoning, now we will treat of Fallaces, or false Conclusions, and shew how to confute them.

Here endeth the fist Booke of Logike.

THE SIXT BOOKE OF Logike.

Of Confutation.

Chap. 1.

THere be some that make two kindes of Confutation, the one belonging to person, the other to matter, confutation of person is done eyther by taunting, rayling, rendring checke for checke, or by scorning, and that eyther by wordes, or else by countenance, gesture and action, which kind of Confutation because it belongeth rather to scoffing then to true order of reasoning, I will leaue to speake thereof, dealing

dealing onely with that confutation that belongeth to matter, which is twofolde, the one generall, the other speciall, it is generall when wee affirme that the argument fayleth eyther in forme, in matter, or in both, againe the generall confutation is done three manner of wayes, that is eyther by denying the consequent, by making distinction, or by instance (that is to say) by bringing in a Contrary example.

Shew when these three waies are to be vsed?

If the argument fayle in forme, then wee must denie the Consequent.

Giue examples?

Discipline is necessarie, but the ceremonies of Moses are discipline, therefore the ceremonies of Moses are necessarie: here you must deny the Consequent, because that of meere particulars nothing followeth, and to be short, when any argument is made cõtrary to the rules of figure and moode before taught, the Consequent is not good, and therefore to be denyed, as here: euery couetous man doth violate the lawes of liberalitie, but euery prodigall man doth violate the lawes of liberalitie, therefore euery prodigall man is a couetous man: this sillogisme being of the second figure is made in Barbara, which moode belongeth not to that figure: but if the argument fayle in matter, that is, when eyther one of the premisses or both are false, then it may be confuted aswell by denying the false part, be it maior or minor, as by vsing distinction, and to finde out the falsenes of the matter, it is necessarie alwaies to haue respect to the maxims of the places, from whence the proofe is fetched, for they do shew which propositions are true, and which are not, as for example in this argument: no painted speech becõmeth Philosophers, but eloquence is painted speech, ergo eloquence becommeth no Philosophers, here the maior is to be denyed because it is a false definition: for the true definition of eloquence is to speake wisely, aptly, adornedly, and to the purpose, and not to vse painted wordes vainely: again who so worshippeth God the creator, worshippeth the true God, the Turkes worship God the Creator, ergo the Turkes worship the true God, this argument is to bee denyed, because the minor is false, for no man can truely worship God the Creator, vnlesse he worship also Iesus Christ his sonne, which the Turkes doe not, and therefore they worship a fained Idoll, and not the true God.

When is distinction to be vsed?

when eyther the wordes or matter is doubtfull.

Giue examples of both?

All verbs actiue do signifie actiõ, but God vsed this verb actiue

Indurabo, in saying I will harden Pharaos hart, ergo God did harden Pharaoes hart, here distinction is to bee made, for verbes actiue haue diuers significations according to the diuersities of the tongues wherein they are uttered: for in the Hebrew tonge verbes actiue do signifie permission or sufferance, as well as action, as these wordes I will harden Pharaoes hearte (is as much to say) as I will suffer Pharaoes heart to bee hardened, likewise whereas we say in the Lordes prayer, lead vs not into temptation, is as much to say, as, suffer vs not to bee led into temptation, againe ambiguitie may be in the matter, as thus: no sinnes are heard of God: but all men are sinners, therefore no men are heard of God, here distinction is to be made betwixt penitent sinners, and impenitent: for God will heare the penitent sinner, although hee will not heare the unpenitent sinner.

When is confutation by instance vsed?

When the argument though it fayle, neither in forme nor matter, yet perhappes it is neither so strong, nor so probable, but that a stronger and more probable may bee made against it.

Giue example?

Who so killeth any Ambassadors in their iorney, doth violate the lawes of Armes: but the French men killed our Ambassador iourneying to Spaine, ergo the French men in so doing did violate the lawes of Armes: here to the Maior a man may answere by instance thus: the Athenians killed the Ambassadors of the Lacedemonians iorneying to the king of Persia, because they went to procure his aide to destroy the citie of Athens, so likewise the Romanes did intercept the Legates of Hanibal going to the king of the Macedonians for the like intent, and yet neither of these people did thinke to breake the lawes of Armes by doing that which should preserue their state and common weale.

Of speciall confutation.

Chap. 2.

WHat is speciall Confutation?

Speciall Confutation is when we confute any false argument, by detecting and shewing the fallax thereof, naming the fallax by his proper name.

What order doth Aristotle obserue in treating of speciall Confutation?

Aristotle

Aristotle first treateth in general of all those thinges that commonly appertaine to the disputations of learned men, as first he treateth of an Elench, which is as much to say as reprehension, then of Syllogismes, and of disputation, and also of the markes and endes of Sophistry, and whereto they tend.

How defineth he an Elench or Reprehension?

Reprehension or Elench (sayeth he) is a Syllogisme which gathereth a conclusion contrary to the assertion of the respondent, as if a man would defend Medea not to loue her child because she killed it, another might reason against him in this manner: euery mother loueth her childe: but Medea is a mother, ergo Medea loueth her childe: the Conclusion of this Syllogisme is contrarie to the first assertion: and note here by the way that there bee two sorres of Elenches, the one true and the other false, it is saide to be true when it rightly gathereth a contrarie conclusion to ỹ respondentes assertion. And false, when it fayleth in any parte requisite to a true Elench: of which partes we shall speake hereafter whē we come to treate of the Fallax called Ignorance of the Elench, which is one of the fiue endes or markes whereunto Sophistrie tendeth, for a true Elench seemeth to belong vnto Dialecticall disputation, rather then to Sophisticall disputation. But now leauing to define a Syllogisme because it hath beene defined before, and therefore not needfull here againe to be rehearsed, I wil proceede to Disputation.

Of Disputation, and how manifolde it is.

Chap. 3.

Disputation is a contention about some question taken in hand, either for finding out of truth, or els for exercise sake, and there be foure kindes of disputation, whereof the first is called doctrinall, because it appertayneth to science.

The second is called Dialecticall, which belongeth to probable opinion.

The third is called Tentatiue, which serueth to trie another mans knowledge, in any kinde of science.

The fourth is called Sophisticall, which tendeth onely to deceiue.

Giue examples of all these foure kindes?

The Doctrinall Disputation, vseth no other but Syllogismes Demon-

Demonstratiue as this is, whatsoeuer hath reason is capable of learning, but Iohn hath reason, ergo Iohn is capable of learning. Dialectical Disputation vseth onely probable syllogismes, as the former example of Medea, euery mother loueth her childe, but Medea is a mother, ergo Medea loueth her childe: against this another probable argument may be made thus, whosoeuer killeth her childe, loueth not her child, but Medea killed her childe, ergo shee loued not her childe. Tentatiue disputation vseth such argumentes as are made of the first common principles of anie science, in which principles who so is ignorant, cannot be skilful in that science, as if a man would professe Geometrie, and know not the definitions of a point, or pricke of a lyne, or superficies, or of such commō maxims, as these are, the whole is more then his parte: take equall from equall, and equall remaine &c. shoulde quicklie bewray his owne ignorance.

Sophisticall disputation, vseth nothing but deceiptfull argumentes, or Fallaxes, whereof there be thirteene kindes hereafter set downe, but first I will shew you which be the fiue markes and endes of Sophistrie.

Of the fiue Markes and Endes of Sophistrie.

Chap. 4.

ARistotle sayeth, that the fraudulent disputation of the Sophister tēdeth alwayes to one of these fiue ends or marks, that is, eyther by force of argument, to bring you into some absurditie which he calleth Elench, that is to say, a reprehension or reproofe, or els to make you to confesse that which is manifestly false, or to grant some Paradox, which is as much to say as an opinion contrary to all mens opinions: or to allow of incongrue speech contrarie to the rules of Grammar called in latine, Solecismus, or to admit some vaine repetition called in latine Nugatio.

Giue example of all these fiue markes?

Of the first marke let this bee your example, if in disputing of vertue you haue perhappes granted that the meditation of vertue doth make a man sad, the Sophister will force you by argument to deny againe that which you before granted thus: all thinges

thinges that be contrarie haue contrarie effectes: but it is proper to vice to make the mind of man sad, ergo vertue maketh his mind glad: this kind of reasoning is more plainely taught before when we talked of Reduction by impossibility.

Of the second marke let this be your example: euery dog hath power to barke: but there is a certaine starre called the dogge, ergo that starre hath power to barke: the Fallax of this argument consisteth onely in the word dogge, which is equiuoke, as shalbe declared more at large hereafter, when we come to speake of that Elench or Fallax.

Of the Parador which is the thirde marke let this bee your example, the Sophister will make you to grant that a rich and happy king is wretched, by force of argument thus: whosoeuer is subiect to sinne is wretched: but all rich and happy kinges are subiect to sinne, ergo all rich and happy kinges are wretched and miserable, in this is also a Fallax, because that happines is spoken here in two respectes, for there is worldly happines and heauenlie happines.

Of the fourth marke called incongruity of speech, I can hardly giue you any fitte example in our native tongue, because that our english adiectiues do not differ in case, gender, or number; and therefore I pray you content your selfe with this latine example, for it is an easier matter for an englishman to speake false latine then false english, the Sophister will make you to allow of this false latine, mulier est candidus, by force of argument thus: omnis homo est candidus, at mulier est homo, ergo mulier est candidus, y. english whereof is thus: euery man is white, but woman is man, ergo a woman is white: here this worde white in the latine is of the masculine gender contrarie, to the rules of Grammar, but this may be very well referred to the Fallax called forme of speech hereafter declared.

Of the fift marke called Nugation, let this be your example: the Sophister will make you to allow of this vaine repetition, Plato is learned, a man learned, by force of argument thus, Plato is learned, but Plato is a man learned, ergo Plato is learned a man learned, here the premisses and the conclusion are al one thing, & therefore contrarie to the rules of Logike. But leauing these thinges as superfluous, and in my iudgement seruing to small purpose, if I may so say without offence, I minde therefore now to returne to my matter first intended.

How to confute all manner of Elenches, or Fallaxes whatsoeuer they bee.

Chap. 4.

EVeric Fallax consisteth eyther in wordes or in thinges: and of those that consist in wordes there are in number six, and of others consisting in thinges, there are seauen, so as in all there be thirteene, as I saide before.

Which be those six that consist in wordes?

Equiuocation, Amphibologie, or doubtfull speech, Coniunction, Diuision, Accent, and figure, or forme of speech.

Shew what these Fallaxes be, and giue examples?

Equiuocation is, when the deceipt consisteth in the doubtfulnes of some one word, hauing diuers significations, as for example, euery dogge is a sensible bodie, there is a certaine starre called a Dogge, ergo that starre is a sensible bodie: here the conclusion is to be denyed, because this worde dogge hath diuerse significations, another example, the prophet sayeth that there is no euill in the Citie, but God doth it, but there bee horrible euils in the Citie, ergo God is the author of euill, the Conclusion is to bee denyed, because in the maior this worde euil signifyeth punishment, and in the minor it signifyeth sinne: another example, whosoeuer loueth Christ, obserueth his worde, and is beloued of the Father: but no bodie that breaketh the law obserueth the word of Christ, therefore no body is beloued of the Father, here the maior is doubtfull, because this voice worde, may bee taken eyther for the worde of the law, or els, for the worde of the Gospell, which the Apostles did euer keepe, as Christ himselfe sayeth, and therefore they were beloued of the Father, and so consequently euery true christian that doth keepe the pure doctrine of Christ is beloued of the Father: but the worde of the law sayeth that euerygne is curled that abideth not in all.

Equi uoca tio. 1.

Amphibologia or doubtful speech is when some whole sentence is doubtfull, and may be interpreted diuerse wayes as the oracle of Apollo in saying that Crœsus passing the riuer of Halis shal ouerthrow a great Empire, by which oracle was meant that hee

Amphibologia. 2.

should

shoulde ouerthrow his owne empire, and not the Persian empire, which by wrong construing that Oracle he hoped to subdue.

Composition or coniunction is the ioyning together of things that are to bee seuered. As for example, two and three bee euen and odde, but fiue maketh two and three, therefore fiue is both euen and odde: which kind of argument is to bee denyed, because those thinges are ioyned together which ought to be seuered. Compositio. 3.

Diuision is when things are seuered which should be ioyned together, as, all the wise men of Greece are seuen, Solon and Periander are wise men of Greece, therefore Solon and Periander are seauen, here the Consequent is to be denyed, because Solon and Periander are seuered from the rest whereunto they shoulde bee ioyned. Diuisio. 4

The fallax of accent is when wordes are not rightly and simply pronounced, as whē we do adde to, or take from a word, any aspiration, letter, or sillable, and thereby alter the true signification thereof, as this latine word Hara signifying a swines cote, being pronounced without H. doth signifie an altar. In English let this be your example, Euery Hare is swift on foote, but this is a hayer, (that is to say) a cloth to dry Malt, therefore it is swift on fwt. Of like sort is this old iest of a maister that said to his seruant: Go heat this Capons legge, who immediately did eat it: then his maister being angry said, I badde thee heat it, with an h. no sir (said the seruant) I did eat it with bread. Likewise this fallax may chance by not obseruing the right quantitie of sillables, in any word, as Populus hauing o. long is a Popple tree, but hauing o. short, it signifyeth a people. Or when a word vsed interrogatiuely is made to haue an affirmatiue signification, as for example: Caiphas said to Christ art thou a king? Ergo he confessed Christ to be a king. Or when a worde pronounced ironiously is turned to good earnest, in speaking one thing and meaning another, as thus: My maister saide, come hither you honest man, ergo he said that I was an honest man, when in deed he called him knaue. Accentus. 5

The fallax of forme or manner of speach may be diuers wayes, as first when words are falsely supposed to be like either in signification, in cale, or in gender, or to be of one selfe predicament, because they are like in termination, as Poeta in English a Poet, and Poema in English a Poesie or poeticall worke: these two wordes because they end both in a. ergo they are both of the masculine gender. Also coloured and numbred are like in termination, Forma orationis. 6

tion, ergo they are of one selfe predicament, and yet the first belongeth to the predicament of qualitie, and the other to quantity. Secondly, when a word is vsed in one selfe argument sometime according to his proper signification, and sometime as a tearme of arte: as for example: God is euery where: euery where is an Aduerbe, therefore God is an Aduerbe. A Mouse eateth cheese, but a Mouse is a sillable, ergo a sillable eateth cheese. Here mouse in the Maior hath his proper signification, and in the Minor is vsed as a tearme of art: and the like is to be said of the word euery where in the first example. Thirdly when a worde hath not his proper signification, or is not vsed according to the true phrase of speach wherein it is vttered, as thus: Whatsoeuer thou hast not lost, thou hast still, but thou hast lost no hornes: ergo thou hast hornes. Here this word to lose hath not his proper signification, for we are said to lose properly that which we had, and not ỹ which we neuer had. And finally this fallar is called the common refuge and receptacle of all such kind of sophistrie. Hitherto of the fallaxes in words, now of the fallaxes in thinges.

Of the Fallaxes in things.

Chap. 6.

OF these Fallaxes there be seuen kinds (that is to say) fallacia Accidentis, a dicto secundum quid ad dictum Simpliciter, Ignoratio Elenchi, Petitio principii, Fallacia Consequentis, Causa pro nõ causa, Plura interrogata pro vno responsu: which may bee englished thus: the fallar of the Accident, the fallar of speach respective in steade of speach absolute, ignorance of the Elench, petition of ỹ principle, a cause that is not the cause in deed, and many questions comprehended in one.

Define what these be, and giue examples?

Fallacia Accidentis. 1. Fallacia Accidentis may bee diuers wayes, as first when any thing belonging onely to ỹ substance of some thing, is attributed also to some accident of the said substance, and contrariwise, as thus: whatsoeuer thou hast bought, thou hast eaten, but thou hast bought rawe flesh, ergo thou hast eaten raw flesh: here the Consequent is to bee denyed, because the Maior hath respect to the

the ſubſtance, and the Concluſion to the qualitie: Another example, what I am, thou art not, but I am a man, ergo thou art none. Here in this the Maior hath reſpect to the qualitie, and the concluſion to the ſubſtance. Secondly when Accidentes are not rightly ioyned together, as when the qualities of the bodie are ioyned with the qualities of the mind: as Homer is a Poet, and Homer is blind, ergo Homer is a blind Poet: here the concluſion is to be denyed, becauſe to bee blind and to bee a Poet are diuers qualities, whereof the one belongeth to the mind, and the other to the bodie, and therefore are not rightly ioyned together. Thirdly, as (Melancthon ſaith) when an accidentall cauſe is made a principall cauſe, as thus: Elias was an holy prophete, but Elias was cladde with Camelles haire, ergo I being cladde with Camelles haire am an holy prophet. Here the Concluſion is to bee denied, becauſe to bee cladde with Cameles haire, was not the cauſe of Elias holineſſe. But me thinkes that this and ſuch like examples doe belong rather to the fallax of cauſa pro non cauſa (whereof we ſhall ſpeake hereafter) then to the fallax of the Accident.

The fallax ad dicto ſecundum quid ad dictum Simpliciter chanceth when we go about to make a thing to ſeeme abſolute, that is ſpoken in ſome reſpect, or to bee in all, when it is but in part, as a Moore hath white teeth, ergo a Moore is white: Againe, it may be in reſpect, by reaſon of time, place, perſon, compariſon, and ſuch like. Of time as thus: I ſaw Iohn yeſterday, but I ſaw him not to day, ergo I did ſee him and not ſee him. Of place thus: it is not good to buy and ſell in the church, ergo it is not good to buy and ſell. Of perſon thus: A Magiſtrate may kill a thiefe, ergo euery man may kill a thiefe. Of compariſon thus: Riches are not good to him that cannot vſe them, ergo riches are not good. Dictum ſecundum quid. 2.

Hauing now to ſpeake of the fallax, called the ignorance of the Elench, I thinke good to call againe to your remembrance the definition of an Elench before briefly ſet downe, which is a Sillogiſme rightly gathering a Concluſion contrary to the aſſertion of the reſpondent, which contrarietie conſiſteth of foure principall pointes or reſpectes, whereof if any be wanting, then the contrarietie is not perfect. Ignoratio Elenchi. 3.

Which be thoſe foure poynts?

Firſt that it bee to one ſelfe thing: ſecondly in one ſelfe reſpect, Thirdly, in one ſelfe manner: And fourthly in or at one

selfe time: for if you bee deceyued at any time by some false Elench, in thinking that it rightly gathereth a conclusion meere contrarie to your assertion, when it is not so in deede, by reason that it faileth in some parte requisite and incident to a true Elench: then it may be rightly said that you are deceyued by ignorance of the Elench, which fallax as Aristotle saith, comprehendeth almost all others, and therefore hee maketh a long and obscure definition of an Elench, rehearsing all the particularities thereof nothing apt to be vttered in our English tongue.

Yet I pray you to giue examples of the foure chiefe pointes before mentioned?

Of the first let this be your example: foure is double to two but not to three, Ergo foure is double and not double: this is not to one selfe thing. Of the second thus: this peece of timber is double in length to that peece, but it is not double to the same in breadth, Ergo if it is to one selfe thing both double, and not double to one selfe thing, but not in one selfe respect. Of the third thus: This prince ruleth mightily, but not mercifully, Ergo hee ruleth and not ruleth: this is not in like manner. Of the fourth thus: I sawe Iohn yesterday, but not this day, Ergo I saw him and saw him not, this is not in one selfe time. And all these foure wayes in mine opinion are comprehended in the seconde point: which is when any thing is spoken not absolutely but in diuers respects: wherefore it differeth not much from the fallax of speach respective before declared, sauing that this fallax is more general, and comprehendeth more kinds of fallaxes then that doth.

Petitio principii. 4.

Petition of the principle is, when the Antecedent doth not proue the Consequent, which chaunceth most commonly three manner of wayes: that is, eyther when the proofe is as little knowne as the thing that is to be proued. Secondly when the proofe is lesse knowne then the thing to be proued. Thirdly, when the proofe and the thing to be proued do not differ, but is all one speech, signifying one selfe thing, called of the Greekes Tautologia.

Giue example of these three wayes?

Of the first thus: the Sunne mooueth not, but standeth still in the middest of heauen, giuing light to all the worlde, Ergo the earth is moueable: or thus: The heauens are not made of elementall matter subiect to corruption, Ergo the heauens are incorruptible. Here in both these examples the Antecedent is as doubtful as the Consequent, and therefore proueth nothing. Of the second way thus: Euery sensible body sometime sleepeth, Ergo man sometime sleepeth. Here it is more to bee doubted whether all sensible

senſible bodies, all beaſtes, fowles, and fiſhes do ſometime ſleepe or not, then whether man doth ſometime ſleep: for it is an eaſier matter to know the nature and propertie of one ſpeciall kind then of all, or many kindes. Of the third way thus: Iohn is learned, Ergo Iohn is learned. The ſoule doth liue euer, Ergo it is immortall.

The fallax of the Conſequent chanceth two manner of waies, that is eyther when we thinke the Conſequent to be conuertible with the Antecedent, but it is not ſo in deede, or els when we thinke that vpon the contrarie of the Antecedent, the contrarie of the Conſequent muſt needes alſo follow.

Giue examples of both theſe waies?

This is a man, Ergo it is a ſenſible body: now if I would herof by conuerſion conclude thus: it is a ſenſible body, Ergo it is a man. This were no good conſequent, for euery ſenſible bodie is not a man. Likewiſe when it rayneth, the ground is wet, Ergo when the ground is wet it rayneth, for theſe ſpeaches are not conuertible. Of the ſecond way thus: it is a man, Ergo it is a ſenſible body. It is no man, ergo it is no ſenſible body: Here you ſee that this propoſition, it is no man, is the contrarie of the firſt Antecedent, which ſaith it is a man. Of which contrary, the contrary of the conſequent doth not neceſſarily follow: for though it be no man, yet it may be ſome other ſenſible body. This fallax compzehendeth all ſuch falſe argumentes as doe not obſerue the rules of right and true Conſequents before giuen.

The fallax of non cauſa pro cauſa is, when that thing is made to be the cauſe of the Concluſion, which is not the cauſe in deede, as wine is nought, becauſe it will make a man drunke. Of which drunkennes wine is not the cauſe, but the intemperance of ỹ man and his immoderate vſe thereof, for many thinges that bee good of themſelues may be abuſed, yea euen the libertie of the Goſpell, & yet the doctrine of ỹ Goſpell is not cauſe thereof, but the malice of man abuſing the ſame.

The ſeauenth and laſt Fallax, is when vnaduiſedlie, and without vſing any diſtinction, you make an anſwere to manie queſtions as though they were but one, as for example, the Sophiſter ſeeing two men ſtanding together whereof ỹ one is blind, and the other hath his ſight, will aske you perhappes whether they ſee or not, whereunto if you anſwere directly eyther yea or no, you are by and by taken, for if you ſay that they ſee, then you grant that the blinde man alſo ſeeth, and if you ſay that they doe

Plura interrogata, pro vno reſponſa. 7.

not [illegible] but which seeth is blinde. but if you answer that the one [illegible] and the other not, you shall by such distinction easily [illegible] the Sophisters cauillation: for diuers questions [illegible] in oneths alwaies require diuers answeres.

And thus I ende with the order of confuting all false Elenches, and Fallaxes, the knowledge whereof is very necessarie; for the maintenance of the truth, which God loueth, who is the fountaine of all truth, yea and very truth it selfe, to whome be all honour, glorie, and praise worlde without ende

Amen.

FINIS.

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